



E003

Refrigerators and Freezers

The products in this category are designed to store vaccines and freeze water-packs and include compression and absorption refrigerators, solar direct drives and freezer technologies. Each refrigeration technology and energy source confers different benefits and limitations, and these should be considered carefully before product selection. IMD-PQS standards for these products aim to optimize temperature control, reduce the risk of accidental freezing of vaccines stored in refrigerators, and eliminate the need for thermostat adjustment on electric compression cycle appliances.

Details regarding the products included in each sub-category of E003, as well as guidelines, performance specifications and verification protocols for this category, can be accessed through the drop-down sections below.

WARNING: Domestic refrigerators and freezers should never be used to store vaccines. Performance shortcomings of domestic appliances can seriously compromise the integrity of the cold chain and cause vaccine loss.

E003.1: Refrigerator and freezer technologies

Refrigerators and freezers can operate on electricity or on heat derived from the burning of a liquid fuel or gas.

Electricity may be supplied either by a mains power system, by an electric generator, or from renewable energy sources, typically solar power supplied from a photovoltaic array. Most electric refrigerators are vapor-compression cycle units, of which the ice-lined refrigerator (ILR) is a sub-type.

The table below summarizes the advantages and disadvantages of each refrigeration technology and energy source.

Table 1 : Refrigeration options

Refrigeration cycle and energy source	Thermostatic control	Routine maintenance	Other remarks
Compression cycle with reliable electricity	Good	Very little required	Voltage regulator required when voltage varies widely.
Compression cycle ILR with intermittent electricity	Good	Very little required	Voltage regulator required when voltage varies widely.
Solar electricity or direct drive compression cycle	Good	Routine solar module maintenance	Requires an established solar service network and good solar site evaluation.

E003.2: IMD-PQS compression refrigerators and freezers

Compression refrigerators and freezers are powered by electricity; they cannot operate on gas or kerosene. The electrical supply may come from the main power grid, from a generator or from a renewable energy source such as solar power. Compared to absorption options their great advantage is that compression refrigeration provides powerful and more energy efficient cooling. In addition, compression units have better temperature control in most conditions and less refrigerator maintenance is required.

All new PQS prequalified compression refrigerators listed in the data sheets in this section have vaccine storage compartments that are designed not to freeze if used in accordance with the manufacturer's instructions. In addition, they now have non-adjustable thermostats. However, if vaccines are placed against the internal lining without baskets there is still a risk of freezing. In 2016 WHO IMD-PQS introduced a grading scale: A, B and C. Appliances graded A are certified as low vaccine freezing risk even if baskets are not used (see paragraph on freeze-protection). This new approach should eliminate accidental freezing due to improper user interventions, such as thermostat adjustment or misplacement of vaccines in the refrigerator compartment.

Low-energy chest freezers: These units are used to store oral poliovirus (OPV) vaccines in bulk. Typically, they are used in smaller primary stores where a freezer room is not justified, or at intermediate healthcare levels. They can also be used to freeze water-packs and/or to store frozen ice-packs.

E003.2.1 Mains-powered refrigerators and freezers

E003.2.1.1 Compression refrigerators and freezers with no additional lining

These are standard refrigerators that have been tested to ensure that acceptable vaccine storage temperatures between +2°C and +8°C are maintained in the vaccine storage areas. No freezing (i.e. temperature of 0°C or less) is accepted. If power is

interrupted, these refrigerators will remain below +8°C for at least four hours in continuous hot-zone temperature.

E003.2.1.2 Ice-lined refrigerators (ILR)

Most ILRs can maintain acceptable temperatures below +8°C on as little as eight hours of electricity per 24 hours, day after day. Ice-lined refrigerators are a very good choice wherever there is at least eight hours electricity a day, but no standby power supply. SDD appliances may also be an appropriate option.

Cooling during power cuts is maintained by an internal lining surrounding the vaccine storage compartment. The lining is made up of ice or cold water filled compartments or frozen ice-packs. When the electricity supply fails, this ice or cold-water store keeps the vaccine cool for at least 20 hours. When the power is restored, the compressor runs until the lining is refrozen or re-cooled.

Other new ILR-like products make novel use of chilled water combined with ice. These refrigerators can operate on fewer hours of power per day and provide from 20 hours to over 120 hours of acceptable temperature control without electricity.

Temperature control is inherently stable and potentially extends the reach of the ILR approach to areas with as little as 28 hours of power per week or an average of 4 hours per day.

WARNING: During the refreezing process some areas of an ILR can fall below 0°C – e.g. the bottom of the compartment. For non-grade A appliances freeze- sensitive vaccines should NEVER be stored within 150 mm of the base of these models. Always respect the manufacturer’s storage limit lines inside the cabinet, indicating the extent of the hazardous zone and always use the vaccine storage baskets provided by the manufacturer.

In order to avoid the freezing problem, some programmes adjust the thermostats on older ILRs so that the water-filled lining remains liquid. This strategy reduces the appliance’s cold-life but does eliminate the freezing risk. It should be adopted only after a carefully conducted study using data loggers to monitor vaccine temperature in the cold chain. Refer to the [WHO Study Protocol for Temperature Monitoring in the Vaccine Cold Chain](#) for further guidance.

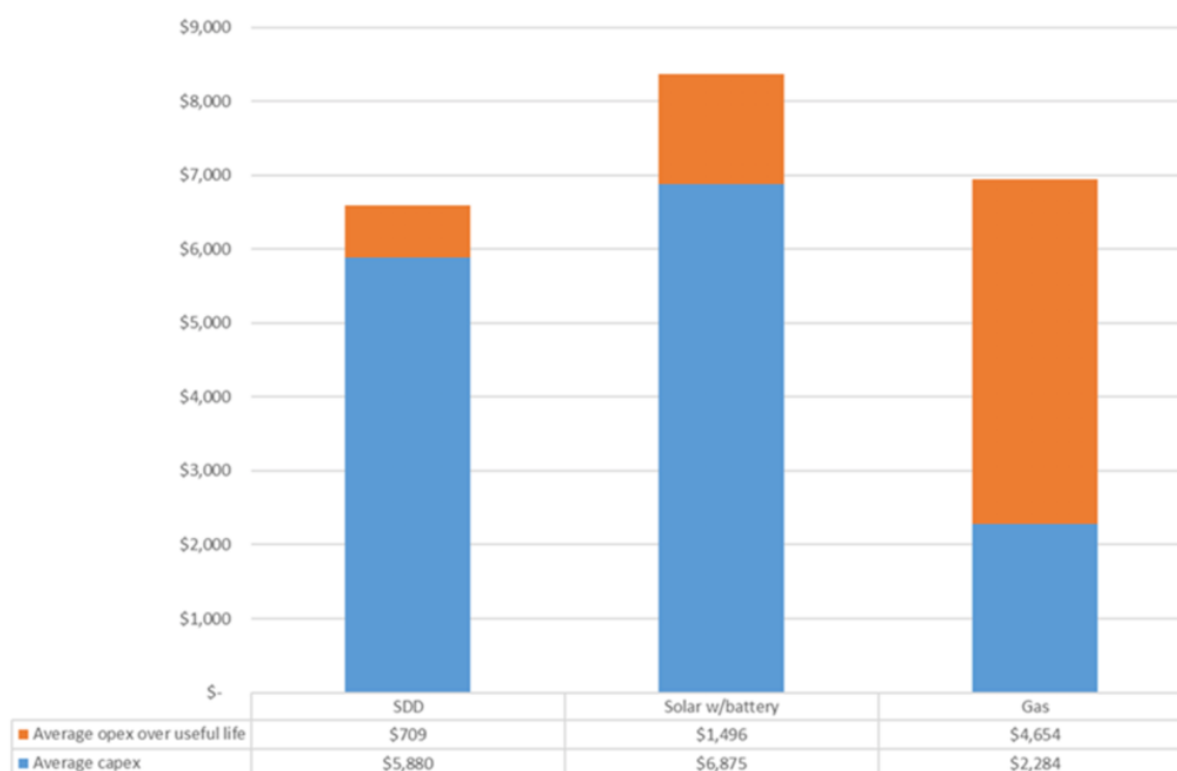
E003.2.2 Solar refrigerators and freezers

Solar powered vaccine refrigeration systems are now widely used. They are sometimes the only available solution in areas where no reliable conventional energy supply is available. Solar powered appliances must pass the relevant appliance tests and must also include a solar power system certified by the appliance manufacturer to be in compliance with the WHO IMD-PQS performance specification [E003/PV01: Solar power system for vaccine refrigerator or combined vaccine refrigerator and water-pack freezer](#). These solar power systems are intended to be delivered as a standard kit and several kit options may be offered.

WHO, PATH and others have conducted several in-depth reviews of solar vaccine refrigeration programmes launched in Africa, the Americas and in South-East Asia. These have shown that:

- The technology can be reliable and improve the quality of the vaccine cold chain when compared with the use of absorption refrigerators.
- The 10-year life cycle cost of solar direct drive (SDD) refrigerators is estimated to be equal or lower than gas-powered refrigeration systems in settings where bottled gas is readily available and its supply is reliable. See Figure 1 below.
- The 10-year life cycle cost of solar battery powered systems remains relatively high in comparison with gas-powered refrigeration systems. Maintenance and replacement of batteries and regulators remains the major problem. Field reports historically indicate that on average, replacement is necessary after five years and these systems are often located in remote, isolated areas making maintenance and battery replacement challenging.
- Solar modules and batteries (when used) must be physically secure to prevent theft of these valuable items. (Due to the cost and maintenance of batteries, SDD systems have become more prevalent.)
- It is essential to ensure that a qualified servicing network is in place to make an on-site assessment, install the systems and provide long-term system maintenance. Replacement of parts such as batteries, battery charge regulators and refrigerator components must be anticipated and fully funded.

Figure 1: TCO comparison between SDD, solar battery and gas refrigerators from the latest PATH TCO tool (2019 July)



Both direct-drive and battery powered models currently provide vaccine storage at +2°C to +8°C. The flow chart under section E003.5 provides guidance on when to select solar refrigeration. It is essential to ensure that there is adequate sunlight throughout the year at all the proposed sites and a solar site evaluation must be conducted before the equipment is installed on site.

There are now two types of solar refrigeration. The first type consists of a compression-cycle refrigerator or freezer or combined refrigerator/freezer powered by a battery-pack which is charged by a photovoltaic array. The second type is a compression-cycle refrigerator or freezer or combined refrigerator/freezer directly driven by the solar array, with energy stored in a sealed thermal mass inside the equipment to maintain cool temperatures overnight. No batteries are needed to operate the compressor. A sub- category of this type uses an ancillary battery to operate a fan.

Field reports indicated that solar-powered refrigeration systems can sometimes achieve a 10+ year service life. This is only possible if the installation is properly planned, correctly designed, competently installed and then supported by a regular maintenance program with adequate, ongoing funding.

Solar refrigeration is a mature technology that can be used with confidence provided certain fundamental conditions are met. These conditions are:

1. Maintenance and repair: All solar equipment requires maintenance or it will fail, especially power systems with a battery. Plan for maintenance in accordance with maintenance tools for users and technicians; provide adequate funding in advance and carry out the work in a timely manner. Only install solar refrigerators at sites which can be reached consistently by a qualified service network throughout the year and in a reasonable time.

2. Equipment selection: A purchase should not be committed until the solar site evaluation has been completed. Then only refrigeration equipment that has been prequalified under WHO IMD-PQS and which is suitable for the climatic conditions at the selected site(s) should be considered. Qualified suppliers should provide a solar power system that is matched to the refrigeration equipment, meets IMD-PQS equipment specifications and is suitable for the site-specific climate. Before buying a large quantity of equipment, a pilot study including one or a few systems must be conducted in order to assess the installation feasibility and the good working conditions in country.

3. Solar site evaluation: Subject to condition 1, the system supplier/installer must carry out a site evaluation and must confirm in writing that:

- The refrigerator can be located in a level, secure and safe position out of direct sunlight and moisture.
- The proposed site has sufficient solar radiation throughout the year to power the chosen equipment (verified by officially-sourced regional multi-year weather data) and that system performance will not be compromised as a result of persistent dust storms, fog, air pollution or other more localized atmospheric effects.

- A solar site analysis has quantified the times of and the amount of shading on the proposed solar array location.
- The system autonomy (amount of energy stored for periods of low solar radiation) has been assessed and is matched to the site-specific autonomy requirement as determined by WHO IMD-PQS specification E003 PV01.
- The site identified to install the solar array is not shaded by trees, vegetation, poles, cables, adjoining structures or buildings. Even something as small as an overhanging cable can seriously affect the efficiency of some solar modules.
- There is a suitable place to mount the solar array so that it cannot easily be vandalized, stolen or accidentally damaged.
- Safe access can be provided to clean and maintain the solar array. Note: this is especially important where snow or dust storms are common.
- Details are specified for any roof-strengthening required and clear guidance is provided on the installation of access ladders and/or safety ropes.
- All cable lengths are estimated as accurately as possible in advance.
- If batteries are used, advice is provided on a suitable and secure location for a battery enclosure (a locking, ventilated box) close to the vaccine refrigerator/freezer

4. Site preparation: The solar site evaluation may show that preparatory building work is required to make the site safe and suitable. If this is so, make arrangements to carry out this work before the equipment is delivered.

5. Servicing network: There must be a competent, trained and affordable solar servicing network in the country. This service network must offer installation and long-term support with a reliable supply of spare parts for the refrigerator, the solar array and battery system (if used).

6. Installation: It is essential that the equipment be installed and commissioned in accordance with the relevant IMD-PQS Quality Assurance protocol: IMD-PQS [PV01-VP2 Solar power system for compression-cycle refrigerator](#) or combined refrigerator/water-pack freezer.

7. User training: Users must be trained in the operation and maintenance of the system. They should also be provided with clear instructions on whom to inform in case of maintenance requests or system failure.

WARNING: The freezer compartments of IMD-PQS prequalified solar refrigerators are not suitable for storing or freezing vaccines. Freezer compartments should only be used to freeze water-packs.

WARNING: Some single compressor solar refrigerators may not be able to freeze icepacks when the ambient temperature is permanently below +15°C to +20°C. If you plan to use a solar refrigerator in a mountainous area or an area where the ambient temperature is permanently or seasonally low, you should select a system with two independent compressors or a model that has shown good performance at low temperatures.

WARNING: The photovoltaic panels and battery packs (whenn used) which power the vaccine refrigerator must be used for this purpose alone. If there is a need for additional photovoltaic power on the site – e.g. for health facility lighting, for small-scale laboratory equipment and the like – this must be supplied from a separate system. If other equipment is supplied from the refrigerator battery pack, its use may be difficult to control and this will drain power and could compromise the vaccine.

IMD-PQS has published Solar Energy Harvest Controller (EHC) specifications to open up the possibilities to use some extra energy supplied by solar arrays, while securing the power to the appliance. Note: this applies only for SDDs approved for use with specific EHCs.

The solar direct drive refrigerators listed in this catalogue are laboratory tested over a specific ambient temperature range, using a specific solar diurnal power cycle.

Establishing the correct size of the solar array for a solar direct drive refrigerator installation **cannot** be done by the purchasing agency. Instead, predetermined system kits with an SDD appliance and matched solar power system are provided. Laboratory testing and the amount of cold storage required by IMD-PQS are based on relatively poor solar radiation conditions to assure adequate solar electricity is generated in most tropical climates.

WARNING: IMD-PQS prequalified equipment may only be used within the limits stated on the relevant IMD-PQS product data sheet. Manufacturers are required to nominate a solar array size at the time of testing. The output from that solar array is used to determine the performance of the refrigerators. Only the nominated array size that is stated on the IMD-PQS product data sheet, or a larger array, may safely be used.

E003.3: IMD-PQS absorption refrigerators and freezers

Absorption refrigerators and water-pack freezers do not perform as well as their compressor-driven equivalents. They may require constant attention to ensure adequate performance for the vaccine cold chain.

Furthermore, models that combine vaccine storage with water-pack freezing within the same insulated chamber do not control temperatures or freeze water-packs as well as models that have separate freezing and vaccine storage areas.

WARNING: Operating costs can be higher with absorption refrigeration than with most other options. For this reason, SDD systems have become more prevalent for locations with unreliable mains power.

E003.4: Choosing a refrigerator or freezer

When you choose a refrigerator or freezer consider the following points (see glossary for definitions):

1. Temperature zone: Assess climate-specific and location-specific factors

- *Climate*: Identify the appropriate temperature zone by checking the mean maximum temperature during the hottest month and the mean minimum during the coldest month. Bear in mind that some parts of the country, e.g. mountain regions, may require equipment with a different temperature rating than other parts.
- *Setting*: Choose potential appliance types to suit the setting using the table below. There are two factors to consider:
 - The mean maximum temperature in the hottest month in the area where the appliance will be located: ignore air-conditioning because it is very likely to be off at weekends and during power cuts and cold chain equipment is often located in store rooms or similar locations.
 - The lowest winter temperature in the room where the appliance will be located: in cold climates, the winter temperature inside a health facility can drop below freezing; e.g. where heating is absent, unreliable, or is turned off at night and/or at weekends. In such cases, choose equipment that is able to operate at low ambient temperatures. Currently there are no models available with active low-temperature protection which can operate at temperatures below +5°C

2. Temperature zone selection

Table 1 : Temperate zone selection

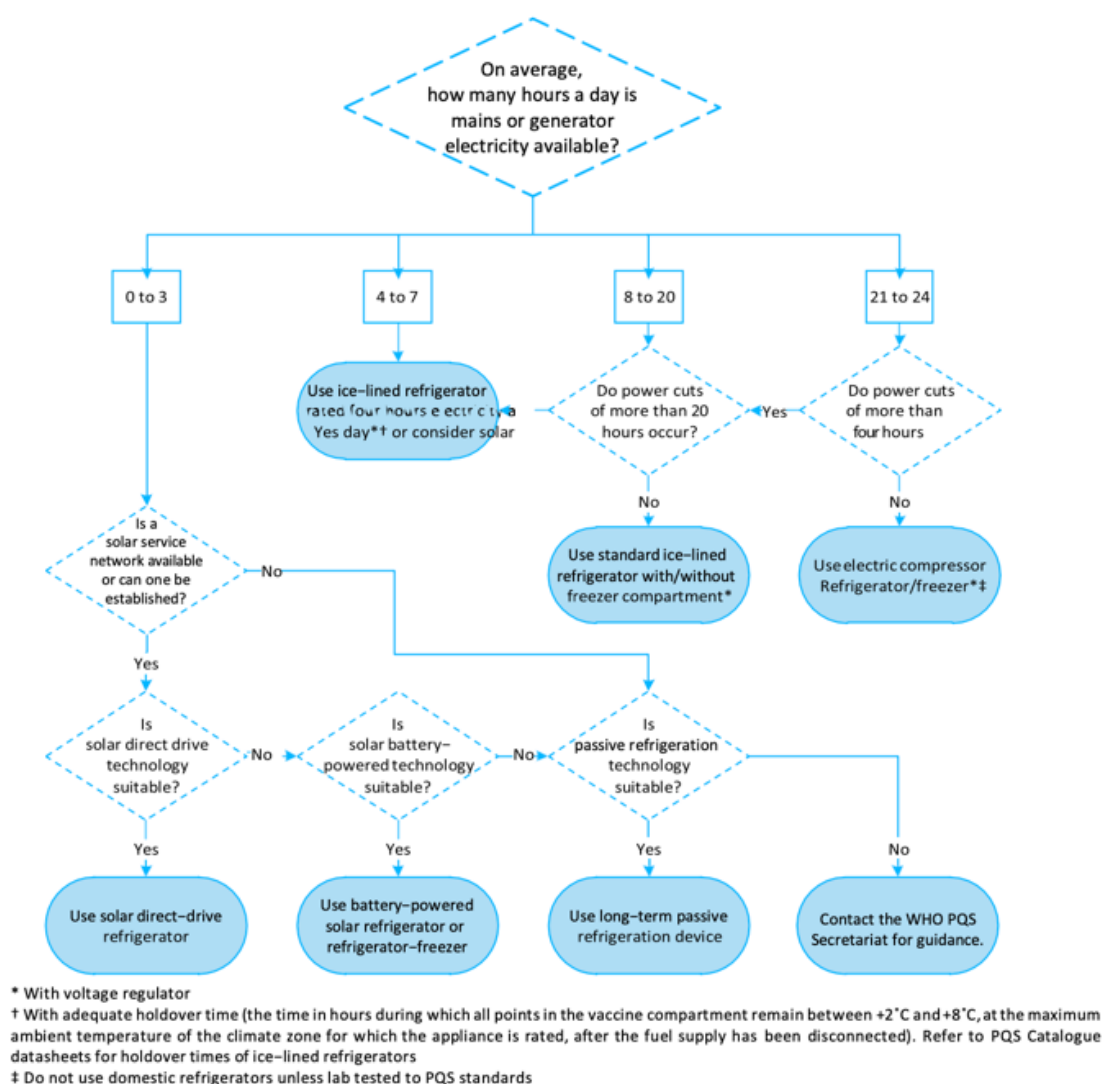
Appliance type LAT = Low Ambient Temperature rating	Mean maximum temperature in hottest month			Lowest winter room temperature	
	<= +27°C	<= +32°C	>+32°C	>= +10°C to +25°C	< +10°C
Hot zone			X	X	
Temperate zone		X		X	
Moderate zone	X			X	
Hot zone + LAT			X		X
Temperate zone + LAT		X			X
Moderate zone + LAT	X				X

3. Vaccine storage capacity: In each setting (primary store, sub-national store or health facility) assess how much vaccine must be stored at +2°C to +8°C and how much at -20°C.

4. Water-pack freezing capacity: If icepacks are required, assess how many water-packs need to be frozen per 24 hours in each setting. Once frozen, the icepacks can be stored in any locally-available chest freezer with low power consumption. If high throughput is not a major concern, chest freezers can be used on their own. Where cold water-packs are used, lower cost, locally available refrigerators are perfectly adequate, so long as they are never used to store vaccine.

5. Energy source: Continuous refrigeration is required for vaccine storage and this requires a reliable source of power. In each setting, assess which power sources are available and which type of refrigeration is most suitable. The available sources are mains electricity, generator produced electricity, renewable energy (e.g. solar electricity), and bottled gas. Solar, gas and long-term passive devices are currently the only alternatives where mains electricity is absent, or is available for less than eight hours per day. The flowchart below outlines the decision process:

Figure 2: Selecting a suitable energy source



6. Associated supplies: Make sure you order the necessary associated supplies at the same time as the refrigerator or freezer. These include:

- *Spare parts:* The data sheets in this section list the spare parts recommended for the first five years of use. To avoid shortages later, order these spares with the equipment. Before purchasing equipment check that repair facilities and spare parts are available, whether from a competent local service agent or in-house.
- *Voltage stabilizer:* Unless mains electricity is highly reliable, order a voltage regulator for all mains or generator powered equipment – see [Section E001 Cold Room and Freezer Rooms](#) and [Section E007 Cold Chain Accessories](#) of the IMD-PQS Catalogue for more information. Note that some suppliers include a voltage regulator either integrated in the device or bundled with the device.
- *Temperature monitoring equipment:* IMD-PQS specifications require all vaccine refrigerators and freezers, whatever the power source, to be supplied with a Level 1 Electronic Monitoring Device (EMD) datalogger. In addition, for reliable continuous temperature monitoring, every vaccine refrigerator should include an external reading thermometer and integrated Level 2 EMD, integrated Level 3 EMD, or a 30-day electronic refrigerator temperature logger. See section [E006 Temperature Monitoring Devices](#) of the IMD-PQS Devices Catalogue for more information. Note: that refrigerator temperature loggers will need to be replaced approximately every two years when the battery runs out. Ensure that adequate recurrent funding is available to purchase these consumable items in future years.

Table 2: EMS configurations

Configuration	I	II	III	IV	V
Data logger plus M2M port (E006/DL01)	✓	✓	✓	✓	✓
Thermometer (E006/TH06) with display		✓		✓	✓
Integrated EMD (E006/EM01)	✓				
External EMD (E006/EM01)		✓			
Integrated EMD with remote data transmission (E006/EM01)			✓		
External EMD with remote data transmission (E006/EM01)				✓	
30 DTR (E006/TR06.3)					✓

- *Manuals:* Order user and service manuals in the appropriate language.
- *Energy harvest:* Energy harvest is a new technology that provides a limited amount of electricity to health facilities with unreliable electricity (weak-grid) or no electrical service (off-grid). Energy harvest is only available for some solar direct drive refrigerators at the current time. See [Section E007 Cold Chain Accessories](#) of the IMD-PQS Devices Catalogue for more information.

7. Training: Ensure that users and maintenance technicians are properly trained to use the specific equipment that you order. All solar systems require on-site installation by a competent technician specifically trained in solar installation work. It is also essential that adequate servicing facilities are available after the equipment has been installed. The importance of training is often underestimated and under-budgeted. A cold chain with good equipment but inadequately trained staff can seriously hamper an immunization programme.

8. Cost: Select the best available refrigerator from the point of view of reliable temperature control and low maintenance. Do not buy solely on the basis of purchase cost. This can lead to expensive loss of vaccine and/or higher lifetime costs due to greater running and maintenance costs.

E003.5: IMD-PQS specification changes

The new IMD-PQS specifications have introduced a number of technical changes. The following are the most significant.

E003.5.1: Electronic Monitoring System (EMS)

A Level 1 Electronic Monitoring Device (EMD) is now required for all vaccine refrigerators. Additionally, an integrate Level 2 EMD or 30-DTR is also required.

E003.5.2: Humidity control

Although humidity control is not required at this time, it is encouraged and is a testing protocol is provided in the Verification Protocol.

E003.6: Recent and future developments

A number of interesting new developments have been pursued by WHO and its partners:

- Solar direct drive freezers have now been prequalified.
- Basic USB EHCs are now common on most SDD appliances: however, these devices cannot take advantage of the full energy from the solar array, which prioritizes the refrigeration load over all others. Therefore EHC options are desirable for health centers that lack access to electricity.

- Transportable, powered vaccine storage appliances are now available. The corresponding IMD-PQS specification is [WHO/PQS/E003/TS01](#). These appliances use batteries to provide "independence" time by actively cooling the vaccines. Thermal insulation provides a further "hold-over" time.
- Phase change materials that freeze at positive temperatures (e.g. +5°C) may be used instead of an ice-lining if permanently contained and affixed into the equipment to prevent vaccine freezing. This technology will provide more cooling capacity than a lining consisting of unfrozen cool water-packs. IMD-PQS has published a specification for containment and use of non-water PCMs: [WHO/PQS/E005/PCMC0.1 – Phase change material containers](#).

CATEGORY DOCUMENTATION, GUIDANCE FOR MANUFACTURERS/SUPPLIERS & SUPPORTING INFORMATION FOR USERS

Performance specifications

[PQS performance specification E003/RF06.4: Refrigerator or combined refrigerator and water-pack freezer: Solar direct drive with ancillary rechargeable battery](#)

[PQS performance specification E003/RF04.4: Refrigerator or combined refrigerator and water-pack freezer: Solar powered with rechargeable battery](#)

[PQS performance specification E003/RF01.4: Refrigerator or combined refrigerator and water-pack freezer: minimal holdover mains powered, compression cycle](#)

[PQS performance specification E003/FZ04.1: Vaccine freezer or combined vaccine and water-pack freezer: Solar-direct drive](#)

[PQS performance specification E003/TS01.1: Transportable, powered vaccine storage appliances](#)

[PQS performance specification E003/RF05.7: Refrigerator or combined refrigerator and water-pack freezer: Solar direct drive without battery storage](#)

[PQS performance specification E003/RF03.6: Refrigerator or combined refrigerator and water-pack freezer: intermittent mains powered, compression cycle](#)

[PQS performance specification E003/ULT01.1: Vaccine ultra-low temperature freezer compression cycle](#)

[PQS performance specification E003/POW01.0: Power systems for ultra-low temperature systems](#)

[PQS performance specification E003/BC01.1: Global asset identification](#)

[PQS performance specification E003/RF02.3: Refrigerator or combined refrigerator and water-pack freezer: absorption cycle](#)

[PQS performance specification E003/RF06.3: Refrigerator or combined refrigerator and water-pack freezer: solar direct drive with ancillary rechargeable battery](#)

[PQS performance specification E003/PV01.4: Solar power system for vaccine refrigerator or combined vaccine refrigerator and water-pack freezer](#)

[PQS performance specification E003/FZ01.2: Vaccine freezer or combined vaccine and water-pack freezer: compression cycle](#)

[PQS performance specification E003/FZ02.2: Water-pack freezer: absorption cycle](#)

[PQS performance specification E003/FZ03.3: Water-pack freezer: solar direct drive without battery storage](#)

Verification protocols

[PQS independent type-testing protocol E003/ULT01-VP.1: Vaccine ultra-low temperature freezer](#)

[PQS independent type-testing protocol E003/TS01-VP.1: Transportable, powered vaccine storage appliances](#)

[PQS On-site freeze protection test protocol Based on E003/RF03-VP.3: Ice-lined refrigerator or combined ice-lined refrigerator and water-pack freezer: compression cycle](#)

[PQS On-site freeze protection test protocol Based on E003/RF05-VP.4: and E003/RF06-VP.2: Refrigerator or combined refrigerator and water-pack freezer, compression-cycle. Solar direct drive with or without ancillary battery](#)

[PQS type-examination protocol E003/POW-VP02.0: Power systems for ultra-low temperature freezing systems](#)

[PQS type-examination protocol E003/POW-VP01.0: Power systems for ultra-low temperature freezing systems](#)

[PQS type examination protocol E003/PV01-VP1.2: Solar power system for compression-cycle vaccine refrigerator or combined refrigerator and water-pack freezer.](#)

[PQS quality assurance protocol E003/PV01-VP2.2: Solar power system for compression-cycle vaccine refrigerator or combined refrigerator and water-pack freezer – on-site checklists for completed installations](#)

[PQS independent type-testing protocol E003/RF01-VP.4: Refrigerator or combined refrigerator and water-pack freezer: minimal holdover mains-powered, compression cycle](#)

[PQS independent type-testing protocol E003/RF02-VP03: Refrigerator or combined refrigerator and water-pack freezer: absorption cycle](#)

[PQS independent type-testing protocol E003/RF03-VP.4: Refrigerator or combined refrigerator and water-pack freezer: intermittent mains-powered, compression cycle](#)

[PQS independent type-testing protocol E003/RF04-VP.4: Refrigerator or combined refrigerator and water-pack freezer: solar powered with rechargeable battery](#)

[PQS independent type-testing protocol E003/RF05-VP.5: Refrigerator or combined refrigerator and water-pack freezer: solar direct drive without battery storage](#)

[PQS independent type-testing protocol E003/RF06-VP.4: Refrigerator or combined refrigerator and water-pack freezer: solar direct drive with ancillary rechargeable battery](#)

[PQS independent type-testing protocol E003/FZ01-VP.2: Vaccine freezer or combined vaccine and water-pack freezer: compression-cycle](#)

[PQS independent type-testing protocol E003/FZ02-VP.2: Vaccine freezer or combined vaccine and water-pack freezer: compression-cycle](#)

[PQS independent type-testing protocol E003/FZ03.VP.1: Water-pack freezer: solar direct drive without battery storage](#)

[PQS independent type-testing protocol E003/FZ04-VP.1: Vaccine freezer or combined vaccine and water-pack freezer: Solar-direct drive](#)

Target product profile

[Target Product Profile: WHO/PQS/E003/TPP01.2 SDD refrigerator](#)

[Target Product Profile: WHO/PQS/E003/TPP02.1 Solar Power System](#)

[Target Product Profile: WHO/PQS/E003/TPP03.1 SDD Freezer](#)

[Draft Target Product Profile: WHO/PQS/E003/TPP04 Mains-powered refrigerator](#)

[Target Product Profile: WHO/PQS/E003/TPP05.1 Humidity control for vaccine refrigerators](#)

Guidance for manufacturers/suppliers

[Generic field evaluation checklist for IMD-PQS reviewers](#)

[Generic guide for the field evaluation of new technologies for WHO PQS prequalification
GENERIC/GUIDE 1.1](#)

[PQS solar autonomy calculation method](#)

[IMD-PQS Guidelines for Prequalification Holders](#)

Supporting information for users

[How to calculate vaccine volumes and cold chain capacity requirements](#)

[How to develop and repair a maintenance system for cold chain equipment](#)

[Introducing solar-powered vaccine refrigerator and freezer systems – A guide for managers in national immunization programmes](#)

[Evidence brief: Solar direct-drive vaccine refrigerators and freezers](#)

[Procurement guidelines: solar direct drive refrigerators and freezers](#)

[Study protocol for temperature monitoring in the vaccine cold chain](#)



E003: Refrigerators and freezers



Product name:	MF 314
IMD-PQS Code:	E003-023
Status:	Prequalified
Date of acceptance:	12 Jan 2011
Appliance type:	E003
Product description:	Vaccine/Waterpacks freezer
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	MF 314
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Hold over time (hours:mn)	4:00
External dimensions length (mm)	700.00	External dimensions width (mm)	1560.00
External dimensions height (mm)	840.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional	Lining	Regular
Energy Consumption During Freezing (kWh/24h)	4.2400	Energy Consumption Cool Down (kWh/24h)	4.2900
Energy Consumption Continuous Power (kWh/24h)	4.2300		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00
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PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer net volume	220-300
Freezer's gross volume (Litres)	281.00	Waterpack freezing capacity (Kg/24 hrs)	7.20
Waterpack storage capacity (Litres)	153.60		

Comments	Equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electrical components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + appliance power plug/cable. Supplied with adjustable legs, elevating appliance to protect against water/rubbish etc. MF 314 is model is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz Freezing capacity range: 5 - 15 kg/24h Range of holdover time: 2 - 5 hours Range waterpack storage capacity: > 200 L Waterpack storage capacity: 256 x 0.6 L
List of accessories	External electronic 30 day TMD FT2 Type 2. 3 Basket, Locking lid + keys. Manual in 6 languages. Plywood packing

List of spare parts, Reference & Price Spare parts to be revised. 1 No. Compressor HXK12AT Complete - Part No. 8-03606510309 1 No. Thermostat freezer - Part No. 7095610 1 No. Voltage stabilizer controller - Part No. 7020475 1 No Starting device, 6520511 1 No Thermometer, solar, Part No.7021091-01

PRICE AND SHIPPING

Shipping volume (m3)	1.161	Shipping weight (kg)	108.50
Incoterms	EXW	Price 1	1-99 units: 1192 €
Price 2	100-199 units: €	Year of base price	2023

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/FZ02.2 Applicable PQS VP(s): E003/FZ02-VP2		

VERIFICATION

Verification Report Reference	A66542-3 issue 1
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PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	MF 114
IMD-PQS Code:	E003-024
Status:	Prequalified
Date of acceptance:	12 Jan 2011
Appliance type:	E003
Product description:	Vaccine/Waterpacks freezer
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	MF 114
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Hold over time (hours:mn)	2:48
External dimensions length (mm)	700.00	External dimensions width (mm)	720.00
External dimensions height (mm)	840.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional	Lining	Regular
Energy Consumption During Freezing (kWh/24h)	3.3300	Energy Consumption Cool Down (kWh/24h)	2.4100
Energy Consumption Continuous Power (kWh/24h)	2.2400		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00
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PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer net volume	50-110
Freezer's gross volume (Litres)	105.00	Waterpack freezing capacity (Kg/24 hrs)	7.20
Waterpack storage capacity (Litres)	38.40		

Comments	Equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electrical components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + appliance power plug/cable. Supplied with adjustable legs, elevating appliance to protect against water/rubbish etc. MF 114 imodel is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz Freezing capacity range: 5 - 15 kg/24h Range of holdover time: 2 - 5 hours Range waterpack storage capacity: 20 - 100 Waterpack storage capacity: 64 x 0.6 L
List of accessories	External electronic 30 day TMD FT2 Type 2, 1 Basket, Locking lid + 2 key. Manual in 6 languages. Plywood packing

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor - HXK80AT Complete - Part No.8-036510018 1 No. Thermostat, freezer - Part No.7095610 1 No. Voltage stabiliser controller 110-285V 50Hz- Part No.7020475 1 No. Thermometer, solar - Part No.7020164 Other parts are available as spares on request..
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PRICE AND SHIPPING

Shipping volume (m3)	0.58	Shipping weight (kg)	70.00
Incoterms	FCA	Price 1	1-99 units: 541 €
Price 2	100-199 units: 422 €	Year of base price	2016

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/FZ02.2 Applicable PQS VP(s): E003/FZ02-VP.2		

VERIFICATION

Verification Report Reference	A66542-1
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PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	MF 214
IMD-PQS Code:	E003-025
Status:	Prequalified
Date of acceptance:	12 Jan 2011
Appliance type:	E003
Product description:	Vaccine/Waterpacks freezer
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	MF 214
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Hold over time (hours:mn)	2:54
External dimensions length (mm)	700.00	External dimensions width (mm)	1130.00
External dimensions height (mm)	840.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional	Lining	Regular
Energy Consumption During Freezing (kWh/24h)	3.5600	Energy Consumption Cool Down (kWh/24h)	2.9600
Energy Consumption Continuous Power (kWh/24h)	3.0000		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00
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PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer net volume	110-220
Freezer's gross volume (Litres)	171.00	Waterpack freezing capacity (Kg/24 hrs)	7.20
Waterpack storage capacity (Litres)	96.00		

Comments	Equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electrical components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + appliance power plug/cable. Supplied with adjustable legs, elevating appliance to protect against water/rubbish etc. MF 214 is model is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz Freezing capacity range: 5 - 15 kg/24h Range of holdover time: 2 - 5 hours Range waterpack storage capacity: 101 - 200 L Waterpack storage capacity: 160 x 0.6 L
List of accessories	External electronic 30 day TMD FT2 Type 2, 2 Basket, Locking lid + 2 key. Manual in 6 languages. Plywood packing

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor - HXK80AT, Complete, R600a - Part No. 8-036510018 1 No. Thermostat, freezer - Part No.7095610 1 No. Thermometer, solar - Part No. 7020164 1 No. Voltage stabilizer controller - Part No. 7020475 Other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	0.846	Shipping weight (kg)	96.30
Incoterms	FCA	Price 1	1-99 units: 615 €
Price 2	100-199 units: 493 €	Year of base price	2016

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/FZ02.2 Applicable PQS VP(s): E003/FZ02-VP.2		

VERIFICATION

Verification Report Reference	A66542-2 issue 1
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PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 3000 SDD
IMD-PQS Code:	E003-030
Status:	Prequalified
Date of acceptance:	25 Jun 2012
Appliance type:	E003
Product description:	Solar direct drive refrigerator
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 3000 SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Temperate	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	94:05
External dimensions length (mm)	780.00	External dimensions width (mm)	1270.00
External dimensions height (mm)	910.00	Appliance tested at (°C)	32.00
Performance at" (°C)	32.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Regular
Energy Consumption Cool Down (kWh/24h)	0.3400	Energy Consumption Continuous Power (kWh/24h)	0.2500

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	156.000	Refrigerator's gross volume (Litres)	278.000
Autonomy (hrs:mn)	86:56	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years as the case may be. For more information and further conditions of warranty, please contact B Medical Systems Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 150L - 220L
List of accessories	5 Baskets, documentation and Instruction manual, 2 keys, lockable lid, 2 spacers, 1 compass, 1 brush
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No.296.9702.09 1 No. E-BOX BD35K SOLAR - Part No. 296.9705.32 1 No. Electronic thermostat/controller(TCW DC Solar) - Part No.292.2009.05 1 No. FAN PAPST #4312NNU 12V 4.3W 410MM - Part No. 292.9960.13 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.07	Shipping weight (kg)	140.00
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Incoterms	EXW	Price 1	Price: >100 units: G1: 6425 €; G2: 7105 €.
Year of base price	2025		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF05.2 Applicable PQS VP(s): E003/RF05-VP.2		
VERIFICATION			
Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 11--018 V2 /16-005		
PRODUCT SITES			
Organization name	B Medical Systems Sarl		
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 2000 SDD
IMD-PQS Code:	E003-035
Status:	Prequalified
Date of acceptance:	17 Dec 2012
Appliance type:	E003
Product description:	Solar direct drive refrigerator/freezer
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 2000 SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Website address:	www.bmedicalsyste.ms.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Temperate	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	94:00
External dimensions length (mm)	1270.00	External dimensions width (mm)	780.00
External dimensions height (mm)	910.00	Appliance tested at (°C)	32.00
Performance at" (°C)	32.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption During Freezing (kWh/24h)	0.9600	Energy Consumption Cool Down (kWh/24h)	0.7400
Energy Consumption Continuous Power (kWh/24h)	0.7800		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	99.000	Refrigerator's gross volume (Litres)	118.000
Autonomy (hrs:mn)	85:24	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer net volume	
Freezer's gross volume (Litres)	42.00	Waterpack freezing capacity (Kg/24 hrs)	2.40
Waterpack storage capacity (Litres)	9.60		

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years as the case may be. For more information and further conditions of warranty, please contact B Medical Systems. Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 90L - 150L Range waterpack storage capacity: 20 - 100L Waterpack storage capacity: 16x0.6L
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List of accessories	4 baskets; 16 waterpacks 0.6L; 4 keys; documentation and instructions, lockable lid, 1 compass, 1 brush, 2 spacers
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No.296.9702.09 1 No. E-box (BD35K Solar) Part No. 2969705.32 1 No. Electronic thermostat/controller (TCW DC Solar) - Part No. 292.2009.05 1 No. Fan (12V, 4,3W, 410) - Part No. 292.9960.13 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.07	Shipping weight (kg)	161.00
Incoterms	EXW	Price 1	>100 units: G1: 9252€; G2: 10,606€
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF05.2 Applicable PQS VP(s): E003/RF05-VP.2		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO- 12-020/16-004/11-017 V2		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VC200SDD
IMD-PQS Code:	E003-040
Status:	Prequalified
Date of acceptance:	13 Mar 2014
Appliance type:	E003
Product description:	Solar Direct Drive vaccine refrigerator
Manufacturer:	Dulas Ltd
Manufacturers Reference:	VC200SDD
Country of Manufacture:	United Kingdom
Address:	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland
Telephone:	+44 (0)7833 297920
Email:	catherine.mclennan@dulas.org.uk
Website address:	http://www.dulassolar.org/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	750.00
External dimensions width (mm)	1280.00	External dimensions height (mm)	980.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Energy Consumption Cool Down (kWh/24h)	0.5200	Energy Consumption Continuous Power (kWh/24h)	0.5000

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	132.000	Refrigerator's gross volume (Litres)	205.200
Autonomy (hrs:mn)	79:29	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A	Waterpack freezing capacity (Kg/24 hrs)	0.00
Waterpack storage capacity (Litres)	0.00		

Comments	Dulas VC200SDD (solar direct drive) vaccine refrigerator. Integrated PCM internal lining used as part of Dulas's Freeze Free technology. Features include lockable handle, twin gasket seals, high strength metal hinges and heavy duty castors. Price includes plug and play solar array and mounting system, as well as solar cables, connectors, fixings and earthing kit (for increased protection against lightning strike). Selection of specialist tools supplied with the system to facilitate installation. Beyond RTMD integrated as standard with display, audible and visual alarm indicators, 120-day local data storage and scannable QR code for instant 30-day PDF reports. Optional remote temperature monitoring subscription service available via cellular network which provides real-time monitoring and reporting of cold chain assets in one easy-to-use cloud-based portal. Shipping weights and volumes are shown for refrigerator only. Details of solar system available upon request.
List of accessories	Supplied with 4 x refrigerator baskets, 2 x keys for the lockable handle, 1 x set of printed manuals ('user's manual', 'installation and technician's manual') available in a selection of languages. Price includes Berlinger Fridge-tag 2 E 30-day electronic temperature logger (E006/040) and complete solar system including all cables and connections necessary for installation in the field.

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 x Dulas SDD controller (for single compressor) – Part No. 5522 1 x Lightning protection board – Part No. 5542 1 x Temperature probe (set of 2) – Part No's. SN4B15P1 & SN4B20P1 1 x Compressor controller – Part No. 101N0420 1 x MCB fridge – Part No. 693-CBTWF060C0 1 x Compressor BD35K – Part No. 101Z0211 Prices and other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	1.33	Shipping weight (kg)	194.00
Incoterms	EXW	Price 1	€4,620 EUR per unit including solar system
Year of base price	2025		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015; ISO 14000:2015
Specification Reference	Applicable PQS specification: E003/RF06.2 Applicable PQS VP(s): E003/RF06-VP.2		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-13-194		

PRODUCT SITES

Organization name	Dulas Ltd
Address	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 40 SDD
IMD-PQS Code:	E003-042
Status:	Prequalified
Date of acceptance:	27 Mar 2014
Appliance type:	E003
Product description:	Solar direct drive refrigerator/freezer TCW 40 SDD
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 40 SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	93:24
External dimensions length (mm)	1030.00	External dimensions width (mm)	780.00
External dimensions height (mm)	900.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption During Freezing (kWh/24h)	0.6900	Energy Consumption Cool Down (kWh/24h)	0.6700
Energy Consumption Continuous Power (kWh/24h)	0.5700		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	36.000	Refrigerator's gross volume (Litres)	46.600
Autonomy (hrs:mn)	81:54	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer net volume	
Freezer's gross volume (Litres)	4.80	Waterpack freezing capacity (Kg/24 hrs)	1.89
Waterpack storage capacity (Litres)	3.60		

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years as the case may be. For more information and further conditions of warranty, please contact B Medical Systems Freezing capacity range: 5 kg/24h Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 25L - 60L Range waterpack storage capacity: 20
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List of accessories	1 basket; 8 waterpacks 0.6 L; 8 waterpack holders; 2 keys; 1 brush; 1 pan for drain; documentation, 1 compass, lockable lid, 2 spacers
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No. 296.9702.09 1 No. E-BOX BD35K SOLAR - Part No. 296.9705.32 1 No. COLD CHAIN CONTROLLER 3-SEN - Part No. 296.9769.98 1 No. FAN PAPST #4312NNU 12V 4.3W 410MM - Part No. 292.9960.13 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.88	Shipping weight (kg)	126.00
Incoterms	EXW	Price 1	> 100 units: G1: 5930€ ; G2: 6529€
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 13-024 V2		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 2043 SDD
IMD-PQS Code:	E003-043
Status:	Prequalified
Date of acceptance:	27 Mar 2014
Appliance type:	E003
Product description:	Solar direct drive refrigerator/freezer TCW2043SDD
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 2043 SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	79:00
External dimensions length (mm)	780.00	External dimensions width (mm)	1270.00
External dimensions height (mm)	910.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption During Freezing (kWh/24h)	1.0500	Energy Consumption Cool Down (kWh/24h)	0.7900
Energy Consumption Continuous Power (kWh/24h)	0.7300		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	70.000	Refrigerator's gross volume (Litres)	79.000
Autonomy (hrs:mn)	73:54	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer net volume	
Freezer's gross volume (Litres)	42.00	Waterpack freezing capacity (Kg/24 hrs)	2.50
Waterpack storage capacity (Litres)	10.50		

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years as the case may be. For more information and further conditions of warranty, please contact B Medical Systems Freezing capacity range: 5 kg/24h Range of holdover time: 51 - 100 hou Range vaccine storage capacity: 60L - 90L Range waterpack storage capacity: 20
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List of accessories	2 baskets; 16 waterpacks 0.6 L; 4 keys; documentation; 1 pan for drain. , 2 lockable lids, 2 spacers, 1 brush, 1 compass
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No.296.9702.09 1 No. E-BOX BD35K SOLAR - Part No. 296.9705.32 1 No. Electronic thermostat/controller (TCW DC Solar) - Part No. 292.2009.05 1 No. FAN PAPST #4312NNU 12V 4.3W 410MM - Part No. 292.9960.13 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.07	Shipping weight (kg)	166.00
Incoterms	EXW	Price 1	> 100 units: G1: 9740€ ; G2: 10936€
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 14001:2015; ISO 9001:2015
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafrroid.fr
Verification Report Reference	WHO 13-025 and WHO 16-009		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 3043 SDD
IMD-PQS Code:	E003-045
Status:	Prequalified
Date of acceptance:	09 Jan 2014
Appliance type:	E003
Product description:	Solar direct drive refrigerator TCW3043SDD
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 3043 SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Website address:	www.bmedicalsyste.ms.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	128:48
External dimensions length (mm)	780.00	External dimensions width (mm)	1270.00
External dimensions height (mm)	910.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Regular
Energy Consumption During Freezing (kWh/24h)	0.0000	Energy Consumption Cool Down (kWh/24h)	0.6800
Energy Consumption Continuous Power (kWh/24h)	0.6800		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	89.000	Refrigerator's gross volume (Litres)	111.000
Autonomy (hrs:mn)	116:41	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years as the case may be. For more information and further conditions of warranty, please contact B Medical Systems Range of holdover time: 101 - 250 hours Range vaccine storage capacity: 90L - 150L
List of accessories	5 baskets; 2 keys; documentation; lockable lid; 2 spacers; 1 compass; 1 brush
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part no. 296.9702.09 1 No. Electronic thermostat/controller (TCW DC Solar) - Part No. 292.2009.05 1 No. E-box BD35K Solar - Part No. 296.9705.32 1 No. Fan (12V, 4.3W) - Part No.292.9960.13 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.07	Shipping weight (kg)	171.00
Incoterms	EXW	Price 1	>100 units: G1: 6955€ ; G2: 7552€
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015;ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 13-026 V2/16-011		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VC150SDD
IMD-PQS Code:	E003-048
Status:	Prequalified
Date of acceptance:	01 Jun 2015
Appliance type:	E003
Product description:	Solar Direct Drive Combined Refrigerator/Freezer
Manufacturer:	Dulas Ltd
Manufacturers Reference:	VC150SDD
Country of Manufacture:	United Kingdom
Address:	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland
Telephone:	+44 (0)7833 297920
Email:	catherine.mclennan@dulas.org.uk
Website address:	http://www.dulassolar.org/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	83:42
External dimensions length (mm)	750.00	External dimensions width (mm)	1280.00
External dimensions height (mm)	980.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	PCM
Energy Consumption During Freezing (kWh/24h)	0.9500	Energy Consumption Cool Down (kWh/24h)	0.9300
Energy Consumption Continuous Power (kWh/24h)	0.8800		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	102.000	Refrigerator's gross volume (Litres)	158.100
Autonomy (hrs:mn)	77:99	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer net volume	
Freezer's gross volume (Litres)	42.90	Waterpack freezing capacity (Kg/24 hrs)	2.04
Waterpack storage capacity (Litres)	8.10		

Comments	Dulas VC150SDD (solar direct drive) combined vaccine refrigerator and water-pack freezer. Integrated PCM internal lining used as part of Dulas's Freeze Free technology. Features include lockable handle, twin gasket seals, high strength metal hinges and heavy duty castors. Price includes plug and play solar array and mounting system, as well as solar cables, branch connectors, fixings and earthing kit (for increased protection against lightning strike). Selection of specialist tools supplied with the system to facilitate installation. Beyond RTMD integrated as standard with display, audible and visual alarm indicators, 120-day local data storage and scannable QR code for instant 30-day PDF reports. Optional remote temperature monitoring subscription service available via cellular network which provides real-time monitoring and reporting of cold chain assets in one easy-to-use cloud-based portal. Shipping weights and volumes are shown for refrigerator only. Details of solar system available upon request.
List of accessories	Supplied with 6 x refrigerator baskets, 2 x keys for the lockable handle, 1 x set of printed manuals ('user's manual', 'installation and technician's manual') available in a selection of languages. Price includes Berlinger Fridge-tag 2 E 30-day electronic temperature logger (E006/040) and complete solar system including all cables and connections necessary for installation in the field.
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 x Dulas SDD controller (for dual compressor) – Part No. 5532 1 x Lightning protection board – Part No. 5542 1 x Temperature probe (set) – Part No. SN4B15P1 & SN4B20P1 & SN4B25P1 1 x Compressor controller – Part No. 101N0420 1 x MCB fridge / freezer – Part No. 693-CBTWF0100C0 1 x Freezer on/off switch – Part No. E5025, E5026 & E5027 1 x Freezer fan – Part No. 89-4367.GN. 1 x Compressor BD35K – Part No. 101Z0211 Prices and other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.33	Shipping weight (kg)	199.00
Incoterms	EXW	Price 1	€6,450 EUR per unit including solar system
Year of base price	2025		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015; ISO 14000:2015
Specification Reference	Applicable PQS specification: E003/RF05.2 Applicable PQS VP(s): E003/RF05-VP.2		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-14-148		

PRODUCT SITES

Organization name	Dulas Ltd
Address	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VC88SDD
IMD-PQS Code:	E003-059
Status:	Prequalified
Date of acceptance:	23 Sep 2015
Appliance type:	E003
Product description:	Solar Direct Drive vaccine refrigerator
Manufacturer:	Dulas Ltd
Manufacturers Reference:	VC88SDD
Country of Manufacture:	United Kingdom
Address:	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland
Telephone:	+44 (0)7833 297920
Email:	catherine.mclennan@dulas.org.uk
Website address:	http://www.dulassolar.org/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	91:39
External dimensions length (mm)	750.00	External dimensions width (mm)	1280.00
External dimensions height (mm)	980.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	PCM
Energy Consumption Cool Down (kWh/24h)	0.5200	Energy Consumption Continuous Power (kWh/24h)	0.5100

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	88.000	Refrigerator's gross volume (Litres)	205.000
Autonomy (hrs:mn)	78:09	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	Dulas VC88SDD (solar direct drive) vaccine refrigerator. Integrated PCM internal lining used as part of Dulas's Freeze Free technology. Features include lockable handle, twin gasket seals, high strength metal hinges and heavy duty castors. Price includes plug and play solar array and mounting system, as well as solar cables, connectors, fixings and earthing kit (for increased protection against lightning strike). Selection of specialist tools supplied with the system to facilitate installation. Beyond RTMD integrated as standard with display, audible and visual alarm indicators, 120-day local data storage and scannable QR code for instant 30-day PDF reports. Optional remote temperature monitoring subscription service available via cellular network which provides real-time monitoring and reporting of cold chain assets in one easy-to-use cloud-based portal. Shipping weights and volumes are shown for refrigerator only. Details of solar system available upon request.
List of accessories	Supplied with 4 x refrigerator baskets, 2 x keys for the lockable handle, 1 x set of printed manuals ('user's manual', 'installation and technician's manual') available in a selection of languages. Price includes Berlinger Fridge-tag 2 E 30-day electronic temperature logger (E006/040) and complete solar system including all cables and connections necessary for installation in the field.

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 x Dulas SDD controller (for single compressor) – Part No. 5522 1 x Lightning protection board – Part No. 5542 1 x Temperature probe (set of 2) – Part No's. SN4B15P1 & SN4B20P1 1 x Compressor controller – Part No. 101N0420 1 x MCB fridge – Part No. 693-CBTWF060C0 1 x Compressor BD35K – Part No. 101Z0211 Prices and other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	1.33	Shipping weight (kg)	194.00
Incoterms	EXW	Price 1	€4,435 EUR per unit including solar system
Year of base price	2025		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015; ISO 14000:2015
Specification Reference	Applicable PQS specification: E003/RF05.2 Applicable PQS VP(s): E003/RF05-VP.2		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-13-194-2		

PRODUCT SITES

Organization name	Dulas Ltd
Address	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	DW-25W147
IMD-PQS Code:	E003-060
Status:	Prequalified
Date of acceptance:	11 Feb 2015
Appliance type:	E003
Product description:	Vaccine/waterpack freezer
Manufacturer:	Qingdao Aucma Global Medical Co.,Ltd.
Manufacturers Reference:	DW-25W147
Country of Manufacture:	China
Address:	315 Qianwangang Road, Economic & Technological Development Zone, Qingdao, China China
Telephone:	+86 532 86763602
Email:	lishouda@aucma.com.cn
Website address:	www.aucmamedicalglobal.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Hold over time (hours:mn)	6:44	External dimensions length (mm)	880.00
External dimensions width (mm)	595.00	External dimensions height (mm)	790.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz	Lining	Regular
Energy Consumption Cool Down (kWh/24h)	2.8100	Energy Consumption Continuous Power (kWh/24h)	3.3100

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	96.000	Refrigerant type	R600a
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PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Rapid water-pack freezer	Freezer's gross volume (Litres)	147.00
Waterpack freezing capacity (Kg/24 hrs)	14.50	Waterpack storage capacity (Litres)	19.40

Comments	Freezer net volume: 50 - 110 L Freezing capacity range: 5 - 15 kg/24h Range of holdover time: 6 - 25 hours Range vaccine storage capacity: 90L - 150L Range waterpack storage capacity: 20
List of accessories	0
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor 1 No. Electronic thermostat 1 No. Fan Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.41	Shipping weight (kg)	45.00
Incoterms	EXW	Price 1	1-99 units, USD 450
Price 2	100-199 units, USD 430	Year of base price	2016

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
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Specification Reference	Applicable PQS specification: E003/FZ01.2 Applicable PQS VP(s): E003/FZ01-VP.2		
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VERIFICATION

Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-14-039		

PRODUCT SITES

Organization name	Qingdao Aucma Global Medical Co.,Ltd.		
Address	315 Qianwangang Road, Economic &Technological Development Zone, Qingdao, China China		
Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	DW-25W300
IMD-PQS Code:	E003-061
Status:	Prequalified
Date of acceptance:	11 Feb 2015
Appliance type:	E003
Product description:	Vaccine/Waterpack freezer
Manufacturer:	Qingdao Aucma Global Medical Co.,Ltd.
Manufacturers Reference:	DW-25W300
Country of Manufacture:	China
Address:	315 Qianwangang Road, Economic & Technological Development Zone, Qingdao, China
Telephone:	+86 532 86763602
Email:	lishouda@aucma.com.cn
Website address:	www.aucmamedicalglobal.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Hold over time (hours:mn)	58:36	External dimensions length (mm)	945.00
External dimensions width (mm)	790.00	External dimensions height (mm)	1226.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz	Lining	Regular
Energy Consumption Cool Down (kWh/24h)	3.5400	Energy Consumption Continuous Power (kWh/24h)	3.3700

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	240.000	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	1.00		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Rapid water-pack freezer	Freezer's gross volume (Litres)	300.00
Waterpack freezing capacity (Kg/24 hrs)	38.30	Waterpack storage capacity (Litres)	44.30

Comments	Freezer net volume: 220 - 300 L Freezing capacity range: > 15 kg/24h Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 220L - 250L Range waterpack storage capacity: > 200
List of accessories	0
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor 1 No. Electronic thermostat 1 No. Fan Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.92	Shipping weight (kg)	75.00
Price 1	1-99 units, USD 540	Price 2	100-199 units, USD 520
Year of base price	2016		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: E003/FZ01.2 Applicable PQS VP(s): E003/FZ01-VP.2		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-14-041		
PRODUCT SITES			
Organization name	Qingdao Aucma Global Medical Co.,Ltd.		
Address	315 Qianwangang Road, Economic &Technological Development Zone, Qingdao, China China		
Current PQS status:	Prequalified	Valid until:	31 May 2026

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 4000 AC
IMD-PQS Code:	E003-066
Status:	Prequalified
Date of acceptance:	03 Aug 2016
Appliance type:	E003
Product description:	Icelined refrigerator
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 4000 AC
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	77:18
External dimensions length (mm)	780.00	External dimensions width (mm)	1625.00
External dimensions height (mm)	915.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	220-240V 50/60Hz	Lining	Ice-lined
Energy Consumption Intermittent Power (kWh/24h)	0.7000	Energy Consumption Cool Down (kWh/24h)	1.2400
Energy Consumption Continuous Power (kWh/24h)	0.8500		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	240.000	Refrigerator's gross volume (Litres)	249.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

Comments	Optionally available: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to all requirements of the WHO PQS E006/TR03.2 except for the LCD display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 years. For more information and further conditions of warranty, please contact B Medical Systems. Optionally available in 115V/60Hz. Delivered with a 30-day temperature recorder as standard Range of holdover time: 51 - 100 hours
List of accessories	6 baskets; 2 keys; 1 brush; 2 spacers; documentation
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (NLE9KTK 220-240V/50-60HZ) - Part No. 296.9701.63 1 No. Controller board - Part No.296.9769.93 1 No. Sensor NTC - Part No.296.9805.06 1 NO. FAN PAPST - Part No. 292.9960.16 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.39	Shipping weight (kg)	183.00
Incoterms	EXW	Price 1	>100 units incl. a 30DTR 4314 €
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 14001:2015; ISO 9001:2015
Specification Reference	Applicable PQS specification: E003/RF03.2 Applicable PQS VP(s): E003/RF03-VP.2		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 15-034 corr 2		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 15R SDD
IMD-PQS Code:	E003-067
Status:	Prequalified
Date of acceptance:	25 May 2016
Appliance type:	E003
Product description:	Solar direct drive refrigerator
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 15R SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	10.00
Freeze protection	Grade A	External dimensions length (mm)	730.00
External dimensions width (mm)	730.00	External dimensions height (mm)	950.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Ice-lined	Energy Consumption Cool Down (kWh/24h)	0.4300
Energy Consumption Continuous Power (kWh/24h)	0.4300		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	16.000	Refrigerator's gross volume (Litres)	26.500
Autonomy (hrs:mn)	81:52	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years. For more information and further conditions of warranty, please contact B Medical Systems. Range of holdover time: 26 - 50 hours Range vaccine storage capacity: Less than 25L
List of accessories	2 baskets; 2 keys; 1 brush; 2 spacers; documentation, lockable lid, 1 compass
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No. 296.9702.09 1 No. E-BOX (BD35K Solar) - Part No. 296.9705.32 1 No. Electronic thermostat/controller - Part No. 296.9768.62 1 No. Fan PAPST (12V, 4.3W 410mm) - Part No. 292.9960.13 1 No. Cold Chain Controller Display Board Part No. 296.9769.91 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.65	Shipping weight (kg)	94.00
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Incoterms	EXW	Price 1	> 100 units: G1: 4882€; G2: 5219 €
Year of base price	2025		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		
VERIFICATION			
Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO-16-002/16-003		
PRODUCT SITES			
Organization name	B Medical Systems Sarl		
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 40R SDD
IMD-PQS Code:	E003-068
Status:	Prequalified
Date of acceptance:	16 Mar 2016
Appliance type:	E003
Product description:	Solar Direct Drive refrigerator
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 40R SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	93:24
External dimensions length (mm)	780.00	External dimensions width (mm)	1030.00
External dimensions height (mm)	900.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption Cool Down (kWh/24h)	0.6700	Energy Consumption Continuous Power (kWh/24h)	0.5700

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	36.000	Refrigerator's gross volume (Litres)	46.600
Autonomy (hrs:mn)	81:54	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years. For more information and further conditions of warranty, please contact B Medical Systems Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 25L - 60L
List of accessories	1 basket; 2 keys; 1 brush; 1 pan for drain; documentation, lockable lid, 2 spacers, 1 compass
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No. 296.9702.09 1 No. E-box (BD35K Solar) - Part No. 296.9705.32 1 No. Electronic thermostat/controller (3-SEN) - Part No. 296.9769.98 1 No. Fan PAPST (12V, 4.3W; 410mm) - Part No.292.9960.13 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.88	Shipping weight (kg)	129.00
Incoterms	EXW	Price 1	> 100 units: G1: 5576 €; G2: 5990 €

Year of base price	2025		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 14001:2015; ISO:9001:2015
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		
VERIFICATION			
Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO-13-024 V2		
PRODUCT SITES			
Organization name	B Medical Systems Sarl		
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 024 SDD
IMD-PQS Code:	E003-069
Status:	Prequalified
Date of acceptance:	04 Aug 2016
Appliance type:	E003
Product description:	Solar direct drive refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 024 SDD
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	91:17
External dimensions length (mm)	645.00	External dimensions width (mm)	555.00
External dimensions height (mm)	830.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Regular	Energy Consumption Cool Down (kWh/24h)	0.2500
Energy Consumption Continuous Power (kWh/24h)	0.2500		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	25.500	Refrigerator's gross volume (Litres)	36.000
Autonomy (hrs:mn)	81:7	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Prices include Vestfrost Solutions SDD PV energy kit comprising of PV panels, roof adjustable bracket system, plug & play installation. Unit equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 25L - 60L
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List of accessories	Vaccine storage top basket; Bottom grating; 30 day electronic temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate
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List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD 35K) Complete R600a Incl. ECU - Part No. 8-036510223 1 No. Thermostat - Part No. 702090044 1 No. Fan Set (KD1208PTB3) 12 V DC Part No. 7090486 1 No. Thermometer, solar, Part No.7020382-03 Other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	0.63	Shipping weight (kg)	75.00
Incoterms	FCA	Price 1	1-99 units: 2,804 €
Price 2	100-199 units:2598 €	Year of base price	2020

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:15
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-15-174		

PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 064 RF AC
IMD-PQS Code:	E003-070
Status:	Prequalified
Date of acceptance:	04 Aug 2016
Appliance type:	E003
Product description:	Combined icelined refrigerator/waterpacks freezer
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 064 RF AC
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 May 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	10.00
Freeze protection	Grade A	Hold over time (hours:mn)	45:00
External dimensions length (mm)	710.00	External dimensions width (mm)	725.00
External dimensions height (mm)	845.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Lining	Ice-lined	Energy Consumption During Freezing (kWh/24h)	1.8000
Energy Consumption Cool Down (kWh/24h)	1.5100	Energy Consumption Continuous Power (kWh/24h)	0.6300

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	52.500	Refrigerator's gross volume (Litres)	75.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer's gross volume (Litres)	5.10
Waterpack freezing capacity (Kg/24 hrs)	1.60		

Comments	Equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electrical components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + appliance power plug/cable. Supplied with adjustable legs, elevating appliance to protect against water/rubbish etc. VLS 064 RF AC imodel is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Freezer net volume: 50 L Freezing capacity range: 5 kg/24h Range vaccine storage capacity: 60L - 90L Range waterpack storage capacity: 20 Waterpack storage capacity: 6 x 0.6L
List of accessories	1 x Vaccine storage top basket; 1 x Bottom grating; 1 x Voltage stabilizer; 1 x 30 day electronic temperature logger; 1 x Holder for temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 X Compressor (HXK80AT Complete) - Part No.8-036510018 1 X Thermostat Dixell XR60CH 230V - Part No. 702090038 1 X Thermostat Dixell XR30CH 230V - Part No. 702090039 1 X Thermometer, solar, Part No.7020382-03 1 X Voltage stabilizer controller Part No. 7020475 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.58	Shipping weight (kg)	98.00
Incoterms	FCA	Price 1	1-99 units: 1,295 €
Year of base price	2020		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008; ISO 14001
Specification Reference	Applicable PQS specification: E003/RF03.2 Applicable PQS VP(s): E003/RF03-VP.2		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-15-181		

PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TFW 3000 AC
IMD-PQS Code:	E003-071
Status:	Prequalified
Date of acceptance:	25 May 2016
Appliance type:	E003
Product description:	Waterpacks freezer
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TFW 3000 AC
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Website address:	www.bmedicalsyste.ms.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	External dimensions length (mm)	780.00
External dimensions width (mm)	1270.00	External dimensions height (mm)	910.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	220-240V 50/60Hz or 110-127/60Hz optional
Lining	Regular	Energy Consumption Cool Down (kWh/24h)	2.2000
Energy Consumption Continuous Power (kWh/24h)	2.1500		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerant type	R290	Solar radiation ref period (kWh/m2/day)	1.00
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PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Rapid water-pack freezer	Freezer's gross volume (Litres)	204.00
Waterpack freezing capacity (Kg/24 hrs)	32.00	Waterpack storage capacity (Litres)	97.20

Comments	This appliance is a waterpacks fast freezer - it uses propane as a coolant. Freezer net volume: 110 - 220 L Freezing capacity range: > 15 kg/24h Range waterpack storage capacity: 101 - 200 Waterpack freezing capacity: 54 x 0.6L Waterpack storage capacity: 162 x 0.6 L
List of accessories	6 baskets; 54 waterpacks 0.6 L; 2 keys; 1 brush; 2 spacers, documentation
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (FFU130UAX 220-240V/50-60HZ) - Part No. 296.9701.72 1 No. Controller board - Part No.296.9769.95 1 No. Sensor - Part No. 296.9804.78 1 No. Condenser fan (230/240V NET3T16ZVN001) - Part No. 296.9759.17 1 No. Start device - Part No. 296.9706.80 1 No. Start capacitor 1 NNo. Cold Chain Controller Display Board - Part No. 296.9769.91 1 No. Cover for Compressor - Part No. 296.9706.82 1 No. Motor Protection - Part No. 296.9706.81 Other parts are available as spares on request. .

PRICE AND SHIPPING

Shipping volume (m3)	1.07	Shipping weight (kg)	126.00
Incoterms	EXW	Price 1	> 100 units: 3394 €
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/FZ01.2 Applicable PQS VP(s): E003/FZ01-VP.2		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 16-001		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VC225ILR
IMD-PQS Code:	E003-072
Status:	Prequalified
Date of acceptance:	25 May 2016
Appliance type:	E003
Product description:	Icelined refrigerator
Manufacturer:	Dulas Ltd
Manufacturers Reference:	VC225ILR
Country of Manufacture:	United Kingdom
Address:	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland
Telephone:	+44 (0)7833 297920
Email:	catherine.mclennan@dulas.org.uk
Website address:	http://www.dulassolar.org/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	94:00
External dimensions length (mm)	750.00	External dimensions width (mm)	1280.00
External dimensions height (mm)	980.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional	Lining	PCM
Energy Consumption Intermittent Power (kWh/24h)	0.6530	Energy Consumption Cool Down (kWh/24h)	0.7640
Energy Consumption Continuous Power (kWh/24h)	0.8030		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	184.000	Refrigerator's gross volume (Litres)	203.000
Refrigerant type	R600a		

Comments	Dulas VC225ILR (ice-lined refrigerator) mains-powered vaccine refrigerator. Integrated PCM internal lining used as part of Dulas's Freeze Free technology. Features include lockable handle, twin gasket seals, high strength metal hinges and heavy duty castors. Beyond RTMD integrated as standard with display, audible and visual alarm indicators, 120-day local data storage and scannable QR code for instant 30-day PDF reports. Optional remote temperature monitoring subscription service available via cellular network which provides real-time monitoring and reporting of cold chain assets in one easy-to-use cloud-based portal. Shipping weights and volumes are shown for refrigerator only.
List of accessories	Supplied with 6 x refrigerator baskets, 2 x keys for the lockable handle, 1 x set of printed manuals ('user's manual', 'installation and technician's manual') available in a selection of languages. Price includes PS-ILR-002XT A.C. to D.C. voltage regulator and power supply (WHO PQS extended range), cables and fixings. Price also includes Berlinger Fridge-tag 2 E 30-day electronic temperature logger (E006/040) and complete solar system including all cables and connections necessary for installation in the field.

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 x Dulas ILR controller (for single compressor) – Part No. 5522 1 x Lightning protection board – Part No. 5542 1 x Temperature probe (set of 2) – Part No's. SN4B15P1 & SN4B20P1 1 x Compressor controller – Part No. 101N0420 1 x MCB fridge – Part No. 693-CBTWF060C0 1 x Compressor BD35K – Part No. 101Z0211 Prices and other parts are available as spares on request
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PRICE AND SHIPPING

Shipping volume (m3)	1.33	Shipping weight (kg)	194.00
Incoterms	EXW	Price 1	€4,575 EUR per unit including voltage stabilizer
Year of base price	2025		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015; ISO 14000:2015
Specification Reference	Applicable PQS specification: E003/RF03.2 Applicable PQS VP(s): E003/RF03-VP.2		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-16-110		

PRODUCT SITES

Organization name	Dulas Ltd
Address	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TFW 40 SDD
IMD-PQS Code:	E003-073
Status:	Prequalified
Date of acceptance:	26 May 2016
Appliance type:	E003
Product description:	Solar Direct Drive Waterpacks Freezer
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TFW 40 SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	External dimensions length (mm)	780.00
External dimensions width (mm)	1030.00	External dimensions height (mm)	900.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Energy Consumption During Freezing (kWh/24h)	0.6400	Energy Consumption Cool Down (kWh/24h)	0.5900
Energy Consumption Continuous Power (kWh/24h)	0.5900		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Autonomy (hrs:mn)	5	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Rapid water-pack freezer	Freezer's gross volume (Litres)	64.00
Waterpack freezing capacity (Kg/24 hrs)	2.16	Waterpack storage capacity (Litres)	11.24

Comments	Prices include the solar system: Generator 1 = roof fixed; Generator 2 = roof adjustable Energy sources: nominal 12 V DC solar electric array. Minimum power 250 watts at solar radiation reference period 3.5 kWh/m2/day Freezer net volume: 50 - 110 L Range freezing capacity: 5 kg/24h Range waterpack storage capacity: 20 - 100L Waterpack storage capacity: 11.24 kg (20 Waterpacks)
List of accessories	8 waterpacks 0.6 L; 8 waterpacks holders; 2 keys; 1 brush; 2 spacers; documentation, lockable lid, 1 compass
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No.296.9702.09 1 No. E-box BD35K Solar - Part No. 296.9705.32 1 No. Electronic thermostat/controller - Part No.296.9769.92 1 No. Fan (12V, 4.3W) - Part No.292.9960.13 1 No. Cold Chain Controller Display Board - Part No. 296.9769.91 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.88	Shipping weight (kg)	119.00
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Incoterms	EXW	Price 1	> 100 units: G1:5281 €; G2: 5620 €
Year of base price	2025		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		
VERIFICATION			
Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO-15036 corr 1		
PRODUCT SITES			
Organization name	B Medical Systems Sarl		
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg		
Current PQS status:	Prequalified	Valid until:	31 May 2026

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HTCD 90 SDD
IMD-PQS Code:	E003-074
Status:	Prequalified
Date of acceptance:	06 Jun 2016
Appliance type:	E003
Product description:	Solar direct drive refrigerator/freezer
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HTCD 90 SDD
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	137
External dimensions length (mm)	1128.00	External dimensions width (mm)	875.00
External dimensions height (mm)	720.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Energy Consumption Cool Down (kWh/24h)	0.9700	Energy Consumption Continuous Power (kWh/24h)	0.9100

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	37.500	Refrigerator's gross volume (Litres)	58.000
Autonomy (hrs:mn)	114.9	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer's gross volume (Litres)	32.00
Waterpack freezing capacity (Kg/24 hrs)	2.43	Waterpack storage capacity (Litres)	12.00

Comments	Optional: Remote temperature monitoring device 180W x 4 or 360Wx 2 Solar Panel power Price includes 30 days temperature logger Freezer net volume: 50 L Freezing capacity range: 5 kg/24h Range of holdover time: 101 - 250 hours Range vaccine storage capacity: 25L - 60L Range waterpack storage capacity: 20
List of accessories	Baskets; manuals; keys
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 2 No. Display - Part No. 0274000357 2 No. Indicator - Part No. 0074000574 1 No. Fan Set - Part No. 0274000351 1 No. Compressor BD-35K - Part No. 0274000118A 1 No. Compressor controller (E-Box) - Part No. 0274000118FJ 1 No. Thermostat - Part No. 0274000352 1 No. Main Switch - Part No. 0274000354 1 No.USB charging port - Part No. 0274000389 1 No. Dry filter - Part No. 0074180001 1 No. Thermo sensor - Part No. 0274000358 1 No. Thermo sensor - Part No. 0274000357A 1 No. Thermo sensor - Part No. 0274000353 2 No. Sticker - Part No. 0270501015C Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.98	Shipping weight (kg)	113.00
Incoterms	FCA	Price 1	Price: USD 5526
Year of base price	2023		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2008;ISO 14001
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		

VERIFICATION

Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-16-153		

PRODUCT SITES

Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		

Current PQS status:	Prequalified	Valid until:	31 May 2026
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HTC 40 SDD
IMD-PQS Code:	E003-075
Status:	Prequalified
Date of acceptance:	06 Jun 2016
Appliance type:	E003
Product description:	Solar direct drive refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HTC 40 SDD
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	122
External dimensions length (mm)	788.00	External dimensions width (mm)	875.00
External dimensions height (mm)	720.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Energy Consumption Continuous Power (kWh/24h)	0.7100		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	22.500	Refrigerator's gross volume (Litres)	40.000
Autonomy (hrs:mn)	117	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	Prices include solar system; 24V solar Panel; 180W x2 Or 360Wx1 Solar Panel power1. Display: Solar LED Temperature Display 2. 2 baskets 3. Optional: Remote temperature monitoring device Range of holdover time: 101 - 250 hours Range vaccine storage capacity: Less than 25L
List of accessories	2 baskets; manuals; keys
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Display - Part No. 0274000357 1 No. Indicator - Part No. 0074000574 1 No. Fan Set - Part No.0274000351 1 No. Compressor BD-35K - Part No. 0274000118A 1 No. Compressor controller (E-Box) - Part No.0274000118FJ 1 No. Thermostat - Part No. 0274000352 1 No. Main Switch - Part No. 0274000354 1 No. USB charging port - Part No. 0274000389 1 No. Dry filter Part - Part No. 0074180001 1 No. Thermo sensor - Part No. 0274000353 1 No. Thermo sensor - Part No. 0274000358 2 No. Sticker - Part No. 0270501015A Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.7	Shipping weight (kg)	82.00
Incoterms	FCA	Price 1	USD 2588

Year of base price	2016		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2008;ISO 14001
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-16-151		
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HTC 110 SDD
IMD-PQS Code:	E003-076
Status:	Prequalified
Date of acceptance:	06 Jun 2016
Appliance type:	E003
Product description:	Solar direct drive refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HTC 110 SDD
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	106
External dimensions length (mm)	1128.00	External dimensions width (mm)	875.00
External dimensions height (mm)	720.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Energy Consumption Continuous Power (kWh/24h)	0.6100		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	59.000	Refrigerator's gross volume (Litres)	110.000
Autonomy (hrs:mn)	96:00	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	Prices include solar system; 24V Solar Panel s, comments:Power of Solar Panel : Specification ref 180W x 2 or 360W x 1; 1. Display: Solar LED Temperature Display 2. 4 baskets 3. Optional: Remote temperature monitoring device Range of holdover time: 101 - 250 hours Range vaccine storage capacity: 25L - 60L
List of accessories	4 baskets; manuals; keys
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Display-0274000357 1 No. Indicator Part-0074000574 1 No. Fan Set Part No.0274000351 1 No. Compressor BD-35K?0274000118A? 1 No. Compressor controller (E-Box) Part-0274000118FJ 1 No. Thermostat-0274000352 1 No. Main Switch-0274000354 1 No. USB charging port-0274000389 1 No. Dry filter Part-0074180001 1 No. Thermo sensor-0274000353 1 No. Thermo sensor-0274000358 2 No. Sticker-0270501015A

PRICE AND SHIPPING

Shipping volume (m3)	0.98	Shipping weight (kg)	105.00
Incoterms	FCA	Price 1	USD 3010

Year of base price	2021		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2008;ISO 14001
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-16-152		
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW15 SDD
IMD-PQS Code:	E003-077
Status:	Prequalified
Date of acceptance:	13 Sep 2016
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator and Freezer
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW15 SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsystems.com
Website address:	www.bmedicalsystems.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	730.00
External dimensions width (mm)	730.00	External dimensions height (mm)	950.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Ice-lined	Energy Consumption During Freezing (kWh/24h)	0.6900
Energy Consumption Intermittent Power (kWh/24h)	0.4900	Energy Consumption Cool Down (kWh/24h)	0.5000
Energy Consumption Continuous Power (kWh/24h)	0.5000		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	16.000	Refrigerator's gross volume (Litres)	26.500
Autonomy (hrs:mn)	84:00	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer's gross volume (Litres)	2.40
Waterpack freezing capacity (Kg/24 hrs)	1.97	Waterpack storage capacity (Litres)	2.40

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years as the case may be. For more information and further conditions of warranty, please contact B Medical Systems Freezer net volume: 50 L Freezing capacity range: 5 kg/24h Range of holdover time: 51 - 100 hours Range vaccine storage capacity:
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List of accessories	2 baskets; 4 water-packs 0.6 L; 4 water-pack holders; 2 keys; 1 brush; 2 spacers; documentation; lockable lid; 1 compass
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No.296.9702.09 1 No. E-box BD35K Solar - Part No.296.9705.32 1 No. Cold Chain Controller - Part No.296.9769.97 1 No. Fan (12V, 4.3W) - Part No.292.9960.13 1 No. Cold Chain Controller Display Board - Part No. 296.9769.91 1 No. Sensor Ice lining - Part No. 296.9804.83 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.65	Shipping weight (kg)	95.00
Incoterms	EXW	Price 1	> 100 units: G1: 4923 €; G2: 5260 €
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: PQS/E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 16-014		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	CFD-50
IMD-PQS Code:	E003-079
Status:	Prequalified
Date of acceptance:	11 Apr 2016
Appliance type:	E003
Product description:	Icelined refrigerator
Manufacturer:	Qingdao Aucma Global Medical Co.,Ltd.
Manufacturers Reference:	CFD-50
Country of Manufacture:	China
Address:	315 Qianwangang Road, Economic &Technological Development Zone, Qingdao, China China
Telephone:	+86 532 86763602
Email:	lishouda@aucma.com.cn
Website address:	www.aucmamedicalglobal.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	10.00
Freeze protection	Grade A	Hold over time (hours:mn)	120
External dimensions length (mm)	655.00	External dimensions width (mm)	545.00
External dimensions height (mm)	1588.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional;Electric Mains 115/60Hz
Lining	Ice-lined	Energy Consumption Cool Down (kWh/24h)	0.7700
Energy Consumption Continuous Power (kWh/24h)	0.5400		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	50.000	Refrigerator's gross volume (Litres)	68.000
Refrigerant type	R290		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	The CFD-50 MetaFridge™ provides safe vaccine storage for health facilities, even in locations that may experience unstable or minimal mains power and extreme ambient temperatures. The robust design includes an integrated voltage stabilizer that protects MetaFridge™ from voltage spikes and brownouts that damage refrigerators. Extensively tested ColdSafe™ technology keeps vaccines cold through multi-day power outages with no risk of freezing. The onboard MetaFridge™ information panel with integrated 30 DTR provides a range of alerts, including low remaining holdover time, to users and remote supervisors. • Requires only 3 hours of power per 24 hours to maintain full 5-day holdover capacity at 43 °C ambient. • Includes a built-in surge protection and voltage stabilizer with input range 82-290V. (PQS prequalified in E007/VS01.3) • Includes a built-in 30-day electronic refrigerator temperature logger that stores and displays temperature and alarm history. (PQS prequalified in E006/TR06.3). MetaFridge also displays remaining holdover time. • Includes an integrated connection to an optional remote monitoring module that transmits temperature data and other key performance metrics. (Hardware and data services package are PQS prequalified in E006/TR03.2.) Contact manufacturer for additional information.) • Unit requires the addition of 32 liters of clean drinking water during installation. More information on ColdSafe™ and other MetaFridge™ technologies is available at www.metafridge.com Range of holdover time: 101 - 250 hou Range vaccine storage capacity: 25L - 60L
List of accessories	Included in price: integrated PQS prequalified voltage stabilizer, integrated PQS prequalified 30 DTR, 2 vaccine storage trays; 3 wire shelves; 2 sets of locks & keys; 1 funnel; documentation Optional: additional vaccine trays, remote monitoring module and data services package
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor 1 No. DC fan 1 No. Transformer 1 No. Electronic control unit Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.77	Shipping weight (kg)	108.00
Incoterms	EXW	Price 1	1 – 99 units: 1,400USD
Price 2	100 or more units: 1,300USD	Year of base price	2016

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008; ISO 14001; OHSAS 18001
Specification Reference	Applicable PQS specification: E003/RF03.2 Applicable PQS VP(s): E003/RF03-VP.2		

VERIFICATION

Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-16-217		

PRODUCT SITES

Organization name	Qingdao Aucma Global Medical Co.,Ltd.
Address	315 Qianwangang Road, Economic &Technological Development Zone, Qingdao, China China

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VC60SDD
IMD-PQS Code:	E003-084
Status:	Prequalified
Date of acceptance:	16 Jan 2017
Appliance type:	E003
Product description:	Solar Direct Drive refrigerator
Manufacturer:	Dulas Ltd
Manufacturers Reference:	VC60SDD
Country of Manufacture:	United Kingdom
Address:	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland
Telephone:	+44 (0)7833 297920
Email:	catherine.mclennan@dulas.org.uk
Website address:	http://www.dulassolar.org/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	94:11
External dimensions length (mm)	750.00	External dimensions width (mm)	1280.00
External dimensions height (mm)	980.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	PCM
Energy Consumption During Freezing (kWh/24h)	0.9500	Energy Consumption Intermittent Power (kWh/24h)	0.7800
Energy Consumption Cool Down (kWh/24h)	0.8000		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	57.000	Refrigerator's gross volume (Litres)	124.000
Autonomy (hrs:mn)	82:48	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer's gross volume (Litres)	24.00
Waterpack freezing capacity (Kg/24 hrs)	2.40	Waterpack storage capacity (Litres)	13.80

Comments	Dulas VC60SDD (solar direct drive) combined vaccine refrigerator and water-pack freezer. Integrated PCM internal lining used as part of Dulas's Freeze Free technology. Features include lockable handle, twin gasket seals, high strength metal hinges and heavy duty castors. Price includes plug and play solar array and mounting system, as well as solar cables, branch connectors, fixings and earthing kit (for increased protection against lightning strike). Selection of specialist tools supplied with the system to facilitate installation. Beyond RTMD integrated as standard with display, audible and visual alarm indicators, 120-day local data storage and scannable QR code for instant 30-day PDF reports. Optional remote temperature monitoring subscription service available via cellular network which provides real-time monitoring and reporting of cold chain assets in one easy-to-use cloud-based portal. Shipping weights and volumes are shown for refrigerator only. Details of solar system available upon request. Waterpack freezing capacity: 2.4kg or 23 x 0.6L packs Waterpack storage capacity 13.8kg or 23 x 0.6L packs
List of accessories	Supplied with 4 x refrigerator baskets, 2 x keys for the lockable handle, 1 x set of printed manuals ('user's manual', 'installation and technician's manual') available in a selection of languages. Price includes Berlinger Fridge-tag 2 E 30-day electronic temperature logger (E006/040) and complete solar system including all cables and connections necessary for installation in the field.
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 x Dulas SDD controller (for dual compressor) – Part No. 5532 1 x Lightning protection board – Part No. 5542 1 x Temperature probe (set) – Part No. SN4B15P1 & SN4B20P1 & SN4B25P1 1 x Compressor controller – Part No. 101N0420 1 x MCB fridge / freezer – Part No. 693-CBTWF0100C0 1 x Freezer on/off switch – Part No. E5025, E5026 & E5027 1 x Freezer fan – Part No. 89-4367.GN. 1 x Compressor BD35K – Part No. 101Z0211 Prices and other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.33	Shipping weight (kg)	199.00
Incoterms	EXW	Price 1	€ 5,225.00 per unit including solar system
Year of base price	2025		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: PQS/E003/RF05.4 Applicable PQS VP(s): E003/RF05-VP.4		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-16-164		

PRODUCT SITES

Organization name	Dulas Ltd
Address	Unit 6, Beeding Close, Southern Cross Trading Estate, PO22 9TS, Bognor Regis United Kingdom of Great Britain and Northern Ireland

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HTD-40
IMD-PQS Code:	E003-086
Status:	Prequalified
Date of acceptance:	06 Sep 2017
Appliance type:	E003
Product description:	Solar Direct Drive Waterpacks Freezer
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HTD-40
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Hold over time (hours:mn)	120
External dimensions length (mm)	788.00	External dimensions width (mm)	875.00
External dimensions height (mm)	720.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Regular	Energy Consumption Cool Down (kWh/24h)	0.4950
Energy Consumption Continuous Power (kWh/24h)	0.4550		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Autonomy (hrs:mn)	120	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer's gross volume (Litres)	48.00
Waterpack freezing capacity (Kg/24 hrs)	2.40	Waterpack storage capacity (Litres)	20.00

Comments	1. Display: Solar LED Temperature Display 2. 2 baskets 3. Power of Solar Panel: 180W x2 Or 360Wx1 Solar Panel power; 4. Optional: Remote temperature monitoring device Freezer net volume: 50 L Freezing capacity range: 5 kg/24h Range of holdover time: 101 - 250 hours Range waterpack storage capacity: 20 - 100
List of accessories	1.Instructions 2.Key 3.Handle component 4.Defrosting shovel 5.Waterpack holder 6.0.4L Water-pack
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Display - Part No. 0274000357 1 No. Indicator Part - Part No. 0074000574 1 No. Fan Set - Part No.0274000351 1 No. Compressor BD-35 - Part No. 0274000118A 1 No. Compressor controller (E-Box)- Part No. 0274000118FJ 1 No. Thermostat - Part No. 0274000352 1 No. Main Switch - Part No. 0274000354 1 No. USB charging port - Part No. 0274000389 1 No. Dry filter - Part No. 0074180001 1 No. Thermo sensor - Part No. 0274000357A 2 No. Sticker - Part No. 0270501015B 1 No. Capacitor - Part No. 0274000393 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.7	Shipping weight (kg)	85.00
Incoterms	FCA	Price 1	USD 2809
Year of base price	2021		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2008; ISO 14001
Specification Reference	Applicable PQS specification: E003/FZ03.1 Applicable PQS VP(s): E003/FZ03-VP.1		

VERIFICATION

Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-16-600		

PRODUCT SITES

Organization name	Qingdao Haier Biomedical Co., Ltd
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HBC-260
IMD-PQS Code:	E003-087
Status:	Prequalified
Date of acceptance:	06 Sep 2017
Appliance type:	E003
Product description:	Ice-lined Refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HBC-260
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	62:14
External dimensions length (mm)	717.00	External dimensions width (mm)	1647.00
External dimensions height (mm)	940.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz
Lining	Ice-lined	Energy Consumption Intermittent Power (kWh/24h)	1.5700
Energy Consumption Cool Down (kWh/24h)	1.4700	Energy Consumption Continuous Power (kWh/24h)	1.6200

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	211.000	Refrigerator's gross volume (Litres)	260.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

Comments	1. Display: Solar LED Temperature Display 2. 5 baskets 3. Low power consumption 4. Optional: Remote temperature monitoring device 5. Includes voltage stabiliser Price does not include voltage regulator Range of holdover time: 26 - 50 hours Range vaccine storage capacity: 150L - 220L
List of accessories	Accessory?1. Instructions 2. Key 3. Handle component 4. Basket 5. Data logger
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Dry filter - Part No. 0074180001 2 No. overload protector - Part No. 0274300008B 1 No. Switch - Part No. 0075050003 1 No. Thermo sensor - Part No. 0274000353A 1 No. Thermo sensor - Part No. 0274000358 1 No. Thermostat with sensor - Part No. 0274000352A 1 No. Compressor - Part No. 0060705994A 1 No. Fan - Part No. 0074000172 2 No. Indicator - Part No. 0075050018 2 No. Displayer - Part No. 0274000357 1 No. Sticker - Part No. 0270501015A Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.43	Shipping weight (kg)	200.00
Price 1	USD 1283	Year of base price	2021

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2008;ISO 14001
Specification Reference	Applicable PQS specification: E003/RF03.2 Applicable PQS VP(s): E003/RF03-VP.2		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-17-165		
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HBC-150
IMD-PQS Code:	E003-088
Status:	Prequalified
Date of acceptance:	06 Sep 2017
Appliance type:	E003
Product description:	Ice-lined Refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HBC-150
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Minimum rated ambient temperature (°C)	5.00	Freeze protection	Grade A
Hold over time (hours:mn)	60:50	External dimensions length (mm)	717.00
External dimensions width (mm)	1128.00	External dimensions height (mm)	872.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz	Lining	PCM
Energy Consumption Intermittent Power (kWh/24h)	0.6700	Energy Consumption Cool Down (kWh/24h)	0.6200
Energy Consumption Continuous Power (kWh/24h)	0.5400		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	122.000	Refrigerator's gross volume (Litres)	150.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	1. Display: Solar LED Temperature Display 2. 3 baskets 3. Low power consumption 4. Optional: Remote temperature monitoring device Price does not include voltage regulator Range vaccine storage capacity: 90L - 150L
List of accessories	Accessory?1. Instructions 2. Key 3. Handle component 4. Basket 5. Data logger
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Dry filter - Part No. 0074180001 2 No. overload protector - Part No. 0274300008B 1 No. Switch - Part No. 0075050003 1 No. Thermo sensor - Part No. 0274000353A 1 No. Thermo sensor - Part No. 0274000358 1 No. Thermostat with sensor - Part No. 0274000352A 1 No. Compressor - Part No. 0274000418 1 No. Fan - Part No. 0074000172 2 No. Indicator - Part No. 0075050018 2 No. Displayer - Part No. 0274000357 1 No. Sticker - Part No. 0270501015A Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.99	Shipping weight (kg)	140.00
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Price 1	USD 999	Year of base price	2021
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2008;ISO 14001
Specification Reference	Applicable PQS specification: PQS/E003/RF03.2 Applicable PQS VP(s): E003/RF03-VP.2		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HBC-80
IMD-PQS Code:	E003-089
Status:	Prequalified
Date of acceptance:	06 Sep 2017
Appliance type:	E003
Product description:	Ice-lined Refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HBC-80
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	59:51
External dimensions length (mm)	717.00	External dimensions width (mm)	788.00
External dimensions height (mm)	872.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz
Lining	Ice-lined	Energy Consumption Intermittent Power (kWh/24h)	0.7300
Energy Consumption Cool Down (kWh/24h)	0.6300	Energy Consumption Continuous Power (kWh/24h)	0.5700

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	61.000	Refrigerator's gross volume (Litres)	80.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	1. Display: Solar LED Temperature Display 2. Low power consumption 3. Optional: Remote temperature monitoring device 4. Price not include: Voltage regulator Range of holdover time: 26 - 50 hours Range vaccine storage capacity: 60L - 90L
List of accessories	1. Instructions 2. Key 3. Handle component 4. Basket 5. Data logger
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Dry filter - Part No. 0074180001 2 No. overload protector - Part No. 0274300008B 1 No. Switch - Part No. 0075050003 1 No. Thermo sensor - Part No. 0274000353A 1 No. Thermo sensor - Part No. 0274000358 1 No. Thermostat with sensor - Part No. 0274000352A 1 No. Compressor - Part No. 0274000418 1 No. Fan - Part No. 0074000172 2 No. Indicator - Part No. 0075050018 2 No. Displayer - Part No. 0274000357 1 No. Sticker - Part No. 0270501015A Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.71	Shipping weight (kg)	110.00
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Price 1	1-100units USD 860	Price 2	>100units USD 788
Year of base price	2021		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2008;ISO 14001
Specification Reference	Applicable PQS specification: PQS/E003/RF03.3 Applicable PQS VP(s): E003/RF03-VP.3		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-17-166		
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	Ultra 16 SDD
IMD-PQS Code:	E003-090
Status:	Prequalified
Date of acceptance:	10 Apr 2017
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	Ultra 16 SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Website address:	www.bmedicalsyste.ms.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	840.00
External dimensions width (mm)	780.00	External dimensions height (mm)	1120.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Ice-lined	Energy Consumption Intermittent Power (kWh/24h)	0.3400
Energy Consumption Cool Down (kWh/24h)	0.3800	Energy Consumption Continuous Power (kWh/24h)	0.3600

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	16.000	Refrigerator's gross volume (Litres)	24.500
Autonomy (hrs:mn)	477:56	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years as the case may be. For more information and further conditions of warranty, please contact B Medical Systems Range vaccine storage capacity: 25L
List of accessories	1 compass; 2 baskets; 2+3 keys; 1 brush; documentation; lockable lid; lockable compartment
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No. 296.9702.09 1 No. Electronic Control Unit (BD35K Solar) - Part No. 296.9705.32 1 No. Cold Chain Controller Display Board - Part No. 296.9769.91 1 No. Fan (12-28 V, 5.6W) - Part No. 292.9960.09 1 No. Cold Chain Controller Ultra 16SDD - Part No. 296.9769.96 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.04	Shipping weight (kg)	196.00
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Incoterms	EXW	Price 1	>100 units: G1: 6587 €; G2: 7037 €
Year of base price	2025		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 14001:2015; ISO 9001:2015
Specification Reference	Applicable PQS specification: E003/RF05.4 Applicable PQS VP(s): E003/RF05-VP.4		
VERIFICATION			
Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 17-002 cor_1/17-007		
PRODUCT SITES			
Organization name	B Medical Systems Sarl		
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 026 RF SDD
IMD-PQS Code:	E003-091
Status:	Prequalified
Date of acceptance:	12 Aug 2017
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator and Freezer
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 026 RF SDD
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	650.00
External dimensions width (mm)	1110.00	External dimensions height (mm)	880.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption During Freezing (kWh/24h)	1.0800	Energy Consumption Intermittent Power (kWh/24h)	1.0200
Energy Consumption Cool Down (kWh/24h)	1.0600		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	20.000	Refrigerator's gross volume (Litres)	35.000
Autonomy (hrs:mn)	73:22	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer's gross volume (Litres)	34.30	Waterpack freezing capacity (Kg/24 hrs)	1.80
Waterpack storage capacity (Litres)	17.40		

Comments	Prices include 2 x Vestfrost Solutions SDD PV energy kit comprising of PV panels, roof adjustable bracket system, plug & play installation. Unit equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu Freezer net volume: 50 L Freezing capacity range: 5 kg/24h Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 25L - 60L Range waterpack storage capacity: 20L
List of accessories	Vaccine storage top basket; Bottom grating; 30 day electronic temperature logger; Self regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages

List of spare parts, Reference & Price Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K 101Z0211) 10-45 V - Part No. 8-036510223 1 No. Thermostat (Dixell) - Part No. 7095322 1 No. THERMOSTAT K-54-L2021 Ranco - Part No. 6520038 1 No. Electronic Control 1 Unit - Part No.6520845 (included in the compressor) 1 No. Fan JamiconKF1225B1HR - Part No. 7030823 1 No. Fan JF0825H1H-B Freezer - Part No. 7090403 1 No. Thermometer - Part No. 7020392-03 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.92	Shipping weight (kg)	141.00
Incoterms	EXW	Price 1	1-99 units - 4,751 €
Price 2	100-199 units - 4,482 €	Year of base price	2020

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015; ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/RF05.4 Applicable PQS VP(s): E003/RF05-VP.4		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-17-118		

PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 056 RF SDD
IMD-PQS Code:	E003-092
Status:	Prequalified
Date of acceptance:	12 Aug 2017
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator and Freezer
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 056 RF SDD
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	650.00
External dimensions width (mm)	1110.00	External dimensions height (mm)	880.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption During Freezing (kWh/24h)	1.1500	Energy Consumption Intermittent Power (kWh/24h)	1.0500
Energy Consumption Cool Down (kWh/24h)	1.1200		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	36.000	Refrigerator's gross volume (Litres)	49.300
Autonomy (hrs:mn)	72:00	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer's gross volume (Litres)	34.30	Waterpack freezing capacity (Kg/24 hrs)	1.80
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Comments	<p>Prices include 2 x Vestfrost Solutions SDD PV energy kit comprising of PV panels, roof adjustable bracket system, plug & play installation. Unit equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features.</p> <p>http://apps.who.int/immunization_standards/vaccine_quality/IMDPQS_catalogue/PdfCatalogue.aspx?cat_type=device Spare part to be revised accordingly 1 No. Thermostat (Dixell) - Part No. 7095326 to be replaced by 1 No. Thermostat - Part No. 702090045 1 No. Fan JF0825H1H-B Freezer - Part No. 7090403 to be replaced by 1 No. Fan Fan Jamicon 3310 KF1225-B1HR-R – Part No. 7030126 Comments to be added: As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Freezer net volume: 50 L Freezing capacity range: 5 kg/24h Range of holdover time: 51 - 100 hou Range vaccine storage capacity: 25L - 60L Range waterpack storage capacity: 20 Waterpack storage capacity: 29 x 0.6L Waterpacks</p>
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List of accessories	Vaccine storage top basket; Bottom grating; 30 day electronic temperature logger; ; Self regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K 101Z0211) 10-45 V - Part No. 8-036510223 1 No. Thermostat (Dixell) - Part No. 702090045 1 No. TERMOSTAT K-54-L2021 Ranco - Part No. 6520038 1 No. Electronic Control 1 Unit - Part No.6520845 (included in the compressor) 1 No. Fan Fan Jamicon 3310 KF1225-B1HR-R – Part No. 7030126 1 No. Thermometer - Part No. 7020392-03 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.92	Shipping weight (kg)	140.00
Incoterms	EXW	Price 1	1-99 units - 5,051 €
Price 2	100-199 units: 4,762 €	Year of base price	2020

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: PQS/E003/RF05.4 Applicable PQS VP(s): E003/RF05-VP.4		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-17-119		

PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 4000 SDD
IMD-PQS Code:	E003-093
Status:	Prequalified
Date of acceptance:	13 Jun 2018
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 4000 SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Website address:	www.bmedicalsyste.ms.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	91:16
External dimensions length (mm)	780.00	External dimensions width (mm)	1625.00
External dimensions height (mm)	915.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption Intermittent Power (kWh/24h)	0.8300	Energy Consumption Continuous Power (kWh/24h)	0.8400

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	220.000	Refrigerator's gross volume (Litres)	249.000
Autonomy (hrs:mn)	91:16	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years as the case may be. For more information and further conditions of warranty, please contact B Medical Systems Range of holdover time: 51 - 100 hours
List of accessories	6 baskets; lockable lid; 2 spacers; 1 brush; documentation; 1 compass; 2 keys
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No. 296.9702.09 1 No. Electronic Control Unit (E-box) - Part No. 296.9705.32 1 No. Electronic thermostat/controller - Part No. 296.9768.63 1 No. Fan (12V, 5.0W) - Part No. 292.9960.11 1 No. Drier - Part No. 296.0945.04 1 No. Controller display board - Part No. 296.9769.91 1 No. Sensor - Part No. 296.9805.06 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.39	Shipping weight (kg)	188.00
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Incoterms	EXW	Price 1	> 100 units: G1: 7433 EUR, G2: 8114 EUR
Year of base price	2025		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 14001:2015; ISO 9001:2015
Specification Reference	Applicable PQS specification: E003/RF05.4 Applicable PQS VP(s): E003/RF05-VP.4		
VERIFICATION			
Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 17-005		
PRODUCT SITES			
Organization name	B Medical Systems Sarl		
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HBCD-90
IMD-PQS Code:	E003-097
Status:	Prequalified
Date of acceptance:	16 Oct 2018
Appliance type:	E003
Product description:	Combined Refrigerator and waterpack freezer
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HBCD-90
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	63:48
External dimensions length (mm)	717.00	External dimensions width (mm)	1128.00
External dimensions height (mm)	872.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz
Lining	PCM	Energy Consumption During Freezing (kWh/24h)	0.9700
Energy Consumption Intermittent Power (kWh/24h)	0.5700	Energy Consumption Cool Down (kWh/24h)	0.6600
Energy Consumption Continuous Power (kWh/24h)	0.7000		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	30.000	Refrigerator's gross volume (Litres)	42.000
Refrigerant type	R600a		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Rapid water-pack freezer	Freezer's gross volume (Litres)	32.00
Waterpack freezing capacity (Kg/24 hrs)	4.00	Waterpack storage capacity (Litres)	16.00

Comments	Optional: Remote temperature monitoring Price not include: Voltage regulator Freezer net volume: 50 L Range of holdover time: 51 - 100 hours
List of accessories	"Keys 2 Handle attachment 1 Refiller 1 Corrosion inhibitors 1 Defroster spade 1"
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Dry filter - Part No. 0074180001 2 No. overload protector - Part No. 0274300008B 1 No. Switch - Part No. 0075050003 1 No. Thermo sensor - Part No. 0274000353A 1 No. Thermo sensor - Part No. 0274000352A 1 No. Sticker - Part No. 0270501015C 1 No. Thermostat - Part No. 0274000352A 1 No. Compressor - Part No. 0274000418 1 No. Fan - Part No. 0074000172 2 No. Indicator - Part No. 0075050018 2 No. Displayer - Part No. 0274000357 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.99	Shipping weight (kg)	135.00
Incoterms	FCA	Price 1	USD 1575
Year of base price	2021		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: E003/RF03.4 Applicable PQS VP(s): E003/RF03-VP.4		

VERIFICATION

Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-18-448		

PRODUCT SITES

Organization name	Qingdao Haier Biomedical Co., Ltd
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	CFD-50 SDD
IMD-PQS Code:	E003-098
Status:	Prequalified
Date of acceptance:	19 Oct 2018
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	Qingdao Aucma Global Medical Co.,Ltd.
Manufacturers Reference:	CFD-50 SDD
Country of Manufacture:	China
Address:	315 Qianwangang Road, Economic & Technological Development Zone, Qingdao, China China
Telephone:	+86 532 86763602
Email:	lishouda@aucma.com.cn
Website address:	www.aucmamedicalglobal.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Freeze protection	Grade A
External dimensions length (mm)	655.00	External dimensions width (mm)	545.00
External dimensions height (mm)	1588.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive; Electric Mains 115/60Hz; Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Lining	Regular	Energy Consumption Cool Down (kWh/24h)	0.7750
Energy Consumption Continuous Power (kWh/24h)	0.7180		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	50.000	Refrigerator's gross volume (Litres)	68.000
Autonomy (hrs:mn)	120	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	"The CFD-50 SDD MetaFridge provides safe, solar-powered vaccine storage for health facilities that have minimal or no mains power, and extreme ambient temperatures. Extensively tested ColdSafe™ thermosyphon technology keeps vaccines cold with no risk of freezing through 5+ day periods with inadequate sunlight. MetaFridge patented technology is licensed for manufacture to Aucma. • Included 3x100W PV modules and universal (roof, ground, pole) PV mounting rack with 20m wiring and 1.5m ground rod. • Included PQS approved energy harvesting outputs with 12V (2A), 2x5V USB (1A), and 3-18V (8A) defined load output options • Integrated 30-day electronic refrigerator temperature logger stores and displays temperature, alarm history and remaining autonomy/holdover time. (PQS prequalified in E006/TR06.3). • Optional remote monitoring module relays key performance metrics to remote users. (Hardware and data services package are PQS prequalified in E006/TR03.2.) Contact manufacturer for additional information. • Includes integrated AC input with voltage range of 90-290V and surge, under, and over voltage protection. Solar power is prioritized if both Solar and AC are connected. • Unit requires the addition of 32 liters of clean water during installation. More information on ColdSafe and other Meta-Fridge technologies is available at www.metafridge.com "
List of accessories	Universal solar panel mounting kit for ground, pole or roof with required tools and instructions for assembly (pole not included); grounding kit; integrated PQS prequalified 30 DTR; integrated energy harvest control (EHC) module; 2 vaccine storage trays; 3 wire shelves; 2 sets of locks & keys; 1 funnel; documentation;
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor 1 No. DC fan 1 No. Electronic control unit Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.78	Shipping weight (kg)	95.00
Incoterms	EXW	Price 1	1 – 99 units: 3200 USD
Price 2	100 or more units: 3100 USD	Year of base price	2018

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: E003/RF05.5 Applicable PQS VP(s): E003/RF05-VP.4		

VERIFICATION

Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-18-430		

PRODUCT SITES

Organization name	Qingdao Aucma Global Medical Co.,Ltd.
Address	315 Qianwangang Road, Economic &Technological Development Zone, Qingdao, China China

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VFS 048 SDD
IMD-PQS Code:	E003-099
Status:	Prequalified
Date of acceptance:	23 Nov 2018
Appliance type:	E003
Product description:	Solar Direct Drive Waterpacks Freezer
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VFS 048 SDD
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Minimum rated ambient temperature (°C)	5.00	External dimensions length (mm)	650.00
External dimensions width (mm)	555.00	External dimensions height (mm)	850.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	3.50
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PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer's gross volume (Litres)	34.30	Waterpack freezing capacity (Kg/24 hrs)	1.60
Waterpack storage capacity (Litres)	17.40		

Comments	Prices include the solar energy system consisting of 4x90Wp, roof adjustable, plug & play Energy requirements: 12V DC solar electric array. 360W radiation reference period 3.5kWh/m2/day. Stated shipping volume and weight, incl. complete Solar Energy System Freezer net volume: 50 L Range waterpack storage capacity: 20 - 100L Waterpack freezing capacity: 1.6 kg/24 h Waterpack storage capacity: 29 X0.6 L
List of accessories	Self-regulating temperature control. Electronic temperature reading. Locking lid + keys. Manual in 6 languages. Plywood packing
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor -1 10-45 V - Part No. 8-036510223 1 No. Thermostat (K-54-L2021 Ranco) - Part No. 6520038 1 No Electronic control unit - Part No. 6520845 (incl. in compressor) 1 No. Fan - Part No. 7030823 1 No. Thermometer - Part No. 7020287-03 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.42	Shipping weight (kg)	167.00
Incoterms	EXW	Price 1	1-99 units: 2.635€
Year of base price	2018		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001
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Specification Reference	Applicable PQS specification: E003/FZ03.1 Applicable PQS VP(s): E003/FZ03-VP.1
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VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-17-118		

PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 40R AC
IMD-PQS Code:	E003-100
Status:	Prequalified
Date of acceptance:	02 Jan 2019
Appliance type:	E003
Product description:	Ice-lined Refrigerator
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 40R AC
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	110
External dimensions length (mm)	1022.00	External dimensions width (mm)	778.00
External dimensions height (mm)	888.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	220-240V 50/60Hz	Lining	Ice-lined
Energy Consumption Intermittent Power (kWh/24h)	0.5900	Energy Consumption Cool Down (kWh/24h)	0.7600
Energy Consumption Continuous Power (kWh/24h)	0.5100		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	36.000	Refrigerator's gross volume (Litres)	456.000
Refrigerant type	R600a		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Waterpack freezing capacity (Kg/24 hrs)	0.00	Waterpack storage capacity (Litres)	0.00
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Comments	Comments: Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 5 years. For more information and further conditions of warranty, please contact B Medical Systems. Bmedical fully integrated automatic voltage stabilization solution, which operates the ILR for any voltage in between 90VAC and 290VAC. It protects the ILR from over and under voltage as well as from surges and spikes required by PQS for AVS.
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List of accessories	1 basket 2 keys 1 brush 2 spacers Documentation Lockable lid 1 travel adapter 1 US Nema 1-15 / 5-15 adapter
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List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No. 296.9702.09 1 No. Electronic Control Unit (BD35K Solar) - Part No. 296.9705.32 1 No. Main board 296.9768.66 1 No. Fan (12V, 4.3W) - Part No. 292.9960.13 1 No. Cold Chain Controller Display Board - Part No. 296.9769.91 1 No. Fuse 15A - Part No. 296.9243.15 Other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	0.88	Shipping weight (kg)	126.00
Incoterms	EXW	Price 1	>100 units: €3011
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015, ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF03.4 Applicable PQS VP(s): E003/RF03_VP.4		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafrroid.fr
Verification Report Reference	WHO 18-002		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW 80 AC
IMD-PQS Code:	E003-101
Status:	Prequalified
Date of acceptance:	02 Jan 2019
Appliance type:	E003
Product description:	Ice-lined Refrigerator
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW 80 AC
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	72:09
External dimensions length (mm)	783.00	External dimensions width (mm)	1020.00
External dimensions height (mm)	892.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	110-240V, 50/60Hz	Lining	Ice-lined
Energy Consumption Intermittent Power (kWh/24h)	0.5900	Energy Consumption Cool Down (kWh/24h)	0.6000
Energy Consumption Continuous Power (kWh/24h)	0.4700		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	81.000	Refrigerator's gross volume (Litres)	83.400
Refrigerant type	R600a		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Waterpack freezing capacity (Kg/24 hrs)	0.00	Waterpack storage capacity (Litres)	0.00
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Comments	Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 5 years. For more information and further conditions of warranty, please contact B Medical Systems. Bmedical fully integrated automatic voltage stabilization solution, which operates the ILR for any voltage in between 90VAC and 290VAC. It protects the ILR from over and under voltage as well as from surges and spikes required by PQS for AVS.
List of accessories	4 basket 2 keys 1 brush 2 spacers Documentation Lockable lid 1 travel adapter set 1 US Nema 1-15/5-15 adapter

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. COLD CHAIN CONTROLLER DISPLAY BOARD – Part No. 296.9769.91 1 No. Compressor (BD35K Solar) - Part No. 296.9702.09 1 No. Electronic Control Unit (E-box) - Part No. 296.9705.32 1 No. Electronic thermostat/controller - Part No. 296.9768.65 1 No. Fan (12V, 4.3W; 410mm) - Part No. 292.9960.13 1 No. Drier - Part No. 296.0945.04 1 No. Controller display board - Part No. 296.9769.91 1 No. Sensor - Part No. 296.9805.06 Other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	0.88	Shipping weight (kg)	111.00
Incoterms	EXW	Price 1	>100 units: 3252€
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015, ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF03.4 Applicable PQS VP(s): E003/RF03_VP.4		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 18-001		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HTC-112
IMD-PQS Code:	E003-102
Status:	Prequalified
Date of acceptance:	27 Feb 2019
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HTC-112
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	1128.00
External dimensions width (mm)	875.00	External dimensions height (mm)	720.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption Intermittent Power (kWh/24h)	0.5900	Energy Consumption Cool Down (kWh/24h)	0.6200

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	75.000	Refrigerator's gross volume (Litres)	112.000
Autonomy (hrs:mn)	92:46	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Optional: Remote temperature monitoring device Power of Solar Panel :180W x 2 or 360W x 1
List of accessories	4 baskets; manuals; keys
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Display - Part No. 0274000357 1 No. Indicator - Part No. 0074000574 1 No. Fan Set Part No.0274000351 1 No. Compressor BD-35K - Part No. 0274000118A 1 No. Compressor controller (E-Box) - Part No.0274000118FJ 1 No. Thermostat - Part No. 0274000352 1 No. Main Switch - Part No. 0274000354 1 No. USB charging port - Part No. 0274000389 1 No. Dry filter - Part No. 0074180001 1 No. Thermo sensor - Part No. 0274000353 1 No. Thermo sensor - Part No. 0274000358 2 No. Sticker - Part No. 0270501015A Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.98	Shipping weight (kg)	105.00
Incoterms	EXW	Price 1	USD 3132
Year of base price	2021		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
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Specification Reference	Applicable PQS specification: E003/RF05.5 Applicable PQS VP(s): E003/RF05-VP.4		
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VERIFICATION

Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-18-496		

PRODUCT SITES

Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 054A SDD
IMD-PQS Code:	E003-106
Status:	Prequalified
Date of acceptance:	10 Feb 2019
Appliance type:	E003
Product description:	Solar direct drive refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 054A SDD
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 Esbjerg Ø Syddanmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	89:32
External dimensions length (mm)	600.00	External dimensions width (mm)	720.00
External dimensions height (mm)	850.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Ice-lined	Energy Consumption Cool Down (kWh/24h)	0.6900
Energy Consumption Continuous Power (kWh/24h)	0.3500		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	55.500	Refrigerator's gross volume (Litres)	108.000
Autonomy (hrs:mn)	89:32	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Prices include Vestfrost Solutions SDD PV energy kit comprising of PV panels, roof adjustable bracket system, plug & play installation. Unit equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 25L - 60L
List of accessories	Vaccine storage top basket; Bottom grating; 30 day electronic temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD 35K) Complete R600a Incl. ECU - Part No. 8-036510223 1 No. Thermostat - Part No. 702090044 1 No. Fan Set (KD1208PTB3) 12 V DC Part No. 7090486 1 No. Thermometer, solar, Part No.7020382-03

PRICE AND SHIPPING

Shipping volume (m3)	0.65	Shipping weight (kg)	85.00
Incoterms	FCA	Price 1	1-99 units: 3,107 €
Price 2	100-199 units: 2.882 €	Year of base price	2016
QUALITY STANDARD			
Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		
VERIFICATION			
Verification Report Reference	100918190MKS-001 issue 2		
PRODUCT SITES			
Organization name	Vestfrost Solutions		
Address	A/S Vestfrost Falkevej 12 Esbjerg Ø Syddanmark Denmark		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 094A SDD
IMD-PQS Code:	E003-107
Status:	Prequalified
Date of acceptance:	10 Feb 2019
Appliance type:	E003
Product description:	Solar direct drive refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 094A SDD
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostolutions.com
Website address:	http://vestfrostolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	77:41
External dimensions length (mm)	700.00	External dimensions width (mm)	930.00
External dimensions height (mm)	860.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Ice-lined	Energy Consumption Cool Down (kWh/24h)	0.4500
Energy Consumption Continuous Power (kWh/24h)	0.2400		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	92.000	Refrigerator's gross volume (Litres)	151.000
Autonomy (hrs:mn)	77:41	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Prices include Vestfrost Solutions SDD PV energy kit comprising of PV panels, roof adjustable bracket system, plug & play installation. Unit equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 150L - 220L
List of accessories	4 x Vaccine storage top basket; Bottom grating; 30 day electronic temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD 35K) Complete R600a Incl. ECU - Part No. 8-036510223 1 No. Thermostat - Part No. 702090044 1 No. Fan Set (KD1208PTB3) 12 V DC Part No. 7090486 1 No. Thermometer, solar, Part No.7020382-03 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.83	Shipping weight (kg)	108.00
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Incoterms	FCA	Price 1	1-99 units: 3.264 €
Price 2	100-199 units: 3.217 €	Year of base price	2016
QUALITY STANDARD			
Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		
VERIFICATION			
Verification Report Reference		101809330MKS-001 Issue 1	
PRODUCT SITES			
Organization name	Vestfrost Solutions		
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 154A SDD Greenline
IMD-PQS Code:	E003-108
Status:	Prequalified
Date of acceptance:	10 Feb 2019
Appliance type:	E003
Product description:	Solar direct drive refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 154A SDD Greenline
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	77:75
External dimensions length (mm)	700.00	External dimensions width (mm)	1270.00
External dimensions height (mm)	860.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Ice-lined	Energy Consumption Cool Down (kWh/24h)	0.5600
Energy Consumption Continuous Power (kWh/24h)	0.5500		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	170.000	Refrigerator's gross volume (Litres)	248.000
Autonomy (hrs:mn)	73:4	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

Comments	Prices include Vestfrost Solutions SDD PV energy kit comprising of PV panels, roof adjustable bracket system, plug & play installation. Unit equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 150L - 220L
List of accessories	4 x Vaccine storage top basket; Bottom grating; 30 day electronic temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD 35K) Complete R600a Incl. ECU - Part No. 8-036510223 1 No. Thermostat - Part No. 702090044 1 No. Fan Set (KD1208PTB3) 12 V DC Part No. 7090486 1 No. Thermometer, solar, Part No.7020382-03 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.83	Shipping weight (kg)	108.00
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Incoterms	FCA	Price 1	1-99 units: 4,345 €
Price 2	100-199 units: 4044 €	Year of base price	2016
QUALITY STANDARD			
Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/RF05.3 Applicable PQS VP(s): E003/RF05-VP.3		
VERIFICATION			
Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danmark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-15-115		
PRODUCT SITES			
Organization name	Vestfrost Solutions		
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 204A
IMD-PQS Code:	E003-109
Status:	Prequalified
Date of acceptance:	10 Feb 2019
Appliance type:	E003
Product description:	Ice-lined refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 204A
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Minimum rated ambient temperature (°C)	5.00	Freeze protection	Grade A
Hold over time (hours:mn)	54	External dimensions length (mm)	700.00
External dimensions width (mm)	730.00	External dimensions height (mm)	850.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz	Lining	Ice-lined
Energy Consumption Cool Down (kWh/24h)	0.5800	Energy Consumption Continuous Power (kWh/24h)	0.5700

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	60.000	Refrigerator's gross volume (Litres)	113.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

Comments	Appliance requires only 4 hours electricity per 24 hours at +43C° Equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electrical components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + appliance power plug/cable. Supplied with adjustable legs, elevating appliance to protect against water/rubbish etc. VLS 204A AC model is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 60L - 90L
List of accessories	2 x Vaccine storage top basket; 1 x Vaccine bottom basket; 1 x Bottom grating; 1 x Voltage stabilizer; 1 x 30 day electronic temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 X Compressor (HXK80AT Complete) - Part No.8-036510018 1 X Thermostat Dixell XR30CH - Part No. 702090042 1 X Thermometer, solar, Part No.7020392-03Spare parts to be revised accordingly 1 X Compressor (HXK80AT Complete) - Part No.8-036510018 1 X Thermostat Dixell XR30CH - Part No. 702090042 1 X Thermometer, solar, Part No.7020392-03 1 X Voltage stabilizer controller Part No. 7020475 Other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	0.58	Shipping weight (kg)	70.00
Incoterms	FCA	Price 1	1-99 units: 919 €
Year of base price	2020		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/RF03 Applicable PQS VP(s): E003/RF03-VP		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	BOM No: 1-n113		

PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 304A AC
IMD-PQS Code:	E003-110
Status:	Prequalified
Date of acceptance:	10 Feb 2019
Appliance type:	E003
Product description:	Icelined refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 304A AC
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	55:30
External dimensions length (mm)	700.00	External dimensions width (mm)	920.00
External dimensions height (mm)	850.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Lining	Ice-lined	Energy Consumption Intermittent Power (kWh/24h)	0.6900
Energy Consumption Cool Down (kWh/24h)	0.6900	Energy Consumption Continuous Power (kWh/24h)	0.6000

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	98.000	Refrigerator's gross volume (Litres)	157.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

Comments	Equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electrical components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + appliance power plug/cable. Supplied with adjustable legs, elevating appliance to protect against water/rubbish etc. VLS 204A AC imodel is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 90L - 150L
List of accessories	3 x Vaccine storage top basket; 2 x Vaccine bottom basket; 1 x Bottom grating; 1 x Voltage stabilizer; 1 x 30 day electronic temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No Compressor (HXK80AT Complete) - Part No.8-036510018 1 No Thermostat Dixell XR30CH - Part No. 702090042 1 No Thermometer, solar, Part No.7020392-03 1 No Voltage stabilizer controller Part No. 7020475 Other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	0.75	Shipping weight (kg)	93.00
Incoterms	FCA	Price 1	1-99 units: 1,033 €
Year of base price	2020		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/RF03.2 Applicable PQS VP(s): E003/RF03-VP.2		

VERIFICATION

Verification Report Reference	12057110OMKS-002a amended
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PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 354A AC
IMD-PQS Code:	E003-111
Status:	Prequalified
Date of acceptance:	10 Feb 2019
Appliance type:	E003
Product description:	Ice-lined refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 354A AC
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	61:53
External dimensions length (mm)	700.00	External dimensions width (mm)	1130.00
External dimensions height (mm)	850.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Lining	Ice-lined	Energy Consumption Intermittent Power (kWh/24h)	0.6400
Energy Consumption Cool Down (kWh/24h)	0.6400	Energy Consumption Continuous Power (kWh/24h)	0.6200

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator's gross volume (Litres)	209.000	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	1.00		

Comments	Equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electrical components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + appliance power plug/cable. Supplied with adjustable legs, elevating appliance to protect against water/rubbish etc. VLS 354A AC imodel is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. (only SDD's). All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Range of holdover time: 51 - 100 hou Range vaccine storage capacity: 150L - 220L
List of accessories	4 x Vaccine storage top basket; 3 x Vaccine bottom basket; 1 x Bottom grating; 1 x Voltage stabilizer; 1 x 30 day electronic temperature logger; 1 x Holder for temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 X Compressor (HXK80AT Complete) - Part No.8-036510018 1 X Thermostat Dixell XR30CH - Part No. 702090042 1 X Thermometer, solar, Part No.7020392-03 1 X Voltage stabilizer controller Part No. 7020475
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PRICE AND SHIPPING

Shipping volume (m3)	0.85	Shipping weight (kg)	110.00
Incoterms	FCA	Price 1	1-99 units: 1,143 €
Year of base price	2016		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/RF03.2 Applicable PQS VP(s): E003/RF03-VP.2		

VERIFICATION

Verification Report Reference	12057110OMKS-003a amended
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PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 404A AC
IMD-PQS Code:	E003-112
Status:	Prequalified
Date of acceptance:	10 Feb 2019
Appliance type:	E003
Product description:	Icelined refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 404A AC
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	62.47
External dimensions length (mm)	700.00	External dimensions width (mm)	1270.00
External dimensions height (mm)	860.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Lining	Ice-lined	Energy Consumption Cool Down (kWh/24h)	0.6900
Energy Consumption Continuous Power (kWh/24h)	0.6700		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	145.000	Refrigerator's gross volume (Litres)	235.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

Comments	Equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electrical components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + appliance power plug/cable. Supplied with adjustable legs, elevating appliance to protect against water/rubbish etc. VLS 404A AC model is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 90L - 150L
List of accessories	4 x Vaccine storage top basket; 3 x Vaccine bottom basket; 1 x Bottom grating; 1 x Voltage stabilizer; 1 x 30 day electronic temperature logger; 1 x Holder for temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 X Compressor (HXK80AT Complete) - Part No.8-036510018 1 X Thermostat Dixell XR30CH - Part No. 702090042 1 X Thermometer, solar, Part No.7020392-03 1 X Voltage stabilizer controller Part No. 7020475 Other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	1.02	Shipping weight (kg)	126.00
Incoterms	FCA	Price 1	1-99 units: 1,231 €
Price 2	100-199 units: 1030 €	Year of base price	2020

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008;ISO 14001;DS/OHSAS 18001:2008
Specification Reference	Applicable PQS specification: E003/RF03.2 Applicable PQS VP(s): E003/RF03-VP.2		

VERIFICATION

Verification Report Reference	A66543 - amended
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PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 504A AC
IMD-PQS Code:	E003-113
Status:	Prequalified
Date of acceptance:	10 Feb 2019
Appliance type:	E003
Product description:	Ice-lined Refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 504A AC
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostolutions.com
Website address:	http://vestfrostolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	55:16
External dimensions length (mm)	700.00	External dimensions width (mm)	1563.00
External dimensions height (mm)	845.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional;Electric Mains 115/60Hz
Lining	Ice-lined	Energy Consumption Intermittent Power (kWh/24h)	0.5910
Energy Consumption Continuous Power (kWh/24h)	0.6380		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	242.000	Refrigerator's gross volume (Litres)	314.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	Equipped with unique QR code that can be used with Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electrical components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + appliance power plug/cable. Supplied with adjustable legs, elevating appliance to protect against water/rubbish etc. VLS 504A AC model is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. PQS number: E003/113 EnergyConsump.IntermittentPower(kWh/24h): 1.3520.591 EnergyConsump.ContinuousPower(kWh/24h): 0.638
List of accessories	6 x Vaccine storage top basket; 4 x Vaccine bottom basket; 1 x Bottom grating; 1 x Voltage stabilizer; 1 x 30 day electronic temperature logger; 1 x Holder for temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 X Compressor (HXK12AT Complete) - Part No. 8-03606510309 1 X Thermostat Dixell XR30CH - Part No. 702090042 1 X Thermometer, solar, Part No.7020392-03 1 X Voltage stabilizer controller Part No. 7020475 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.16	Shipping weight (kg)	150.00
Incoterms	EXW	Price 1	1 – 99 units:
Year of base price	2018		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: E003/RF03.4 Applicable PQS VP(s): E003/RF03-VP.4		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-17-179		

PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HBC-120
IMD-PQS Code:	E003-114
Status:	Prequalified
Date of acceptance:	06 Sep 2020
Appliance type:	E003
Product description:	Ice-lined Refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HBC-120
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	1425.00
External dimensions width (mm)	829.00	External dimensions height (mm)	890.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz	Lining	Ice-lined
Energy Consumption Intermittent Power (kWh/24h)	0.2500	Energy Consumption Cool Down (kWh/24h)	0.3500
Energy Consumption Continuous Power (kWh/24h)	0.4000		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	100.000	Refrigerator's gross volume (Litres)	120.000
Autonomy (hrs:mn)	128.48	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	1.00		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	Optional: Remote temperature monitoring device (Price not include: Voltage regulator); Range of holdover time: 101 - 250 hours Range vaccine storage capacity: 90L - 150L
List of accessories	Keys, Handle component, 30 days Data logger
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor-0060705994A 1 No. Fan 0274000542 1 No. Thermostat 0274000352A 1 No. Dry filter Part-0074180002A 1 No. Switch 0075050003 2 No. Indicator 0075050018 2 No. Displayer 0274000357 2 No. overload protector 0274300008B 1 No. Thermo sensor-0274000353 1 No. Thermo sensor-0274000358 1 No. Sticker-0270501015A Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.44	Shipping weight (kg)	160.00
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Incoterms	EXW	Price 1	1-100units USD 1800
Price 2	>100units USD 1785	Year of base price	2021
QUALITY STANDARD			
Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: Applicable PQS VP(s):		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-19-473		
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HBC-240
IMD-PQS Code:	E003-115
Status:	Prequalified
Date of acceptance:	06 Sep 2020
Appliance type:	E003
Product description:	Ice-lined Refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HBC-240
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	87:14
External dimensions length (mm)	1820.00	External dimensions width (mm)	829.00
External dimensions height (mm)	890.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz
Lining	Ice-lined	Energy Consumption Intermittent Power (kWh/24h)	0.4000
Energy Consumption Cool Down (kWh/24h)	0.4000	Energy Consumption Continuous Power (kWh/24h)	0.4400

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	200.000	Refrigerator's gross volume (Litres)	240.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

Comments	Optional: Remote temperature monitoring device Keys, Handle component, 30 days Data logger (Price does not include: Voltage regulator); Range vaccine storage capacity: 150L - 220L
List of accessories	Optional: Remote temperature monitoring device
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor - Part No. 0060705994A 1 No. Fan - Part No. 0274000542 1 No. Thermostat -Part No. 0274000352A 1 No. Dry filter - Part No. 0074180002A 1 No. Switch - Part No. 0075050003 2 No. Indicator -Part No. 0075050018 2 No. Displayer - Part No. 0274000357 2 No. overload protector - Part No. 0274300008B 1 No. Thermo sensor - Part No. 0274000353 1 No. Thermo sensor - Part No. 0274000358 1 No. Sticker - Part No. 0270501015A Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.8	Shipping weight (kg)	186.00
Incoterms	EXW	Price 1	1-100units USD 2000
Price 2	>100units USD 1890	Year of base price	2021

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: Applicable PQS VP(s):		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-19-356		
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HTC-120-SDD
IMD-PQS Code:	E003-116
Status:	Prequalified
Date of acceptance:	06 Sep 2020
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HTC-120-SDD
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Minimum rated ambient temperature (°C)	5.00	Freeze protection	Grade A
External dimensions length (mm)	1425.00	External dimensions width (mm)	825.00
External dimensions height (mm)	865.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - absorption	Energy source	Solar direct drive
Lining	Ice-lined	Energy Consumption Intermittent Power (kWh/24h)	0.4400
Energy Consumption Cool Down (kWh/24h)	0.4800		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	100.000	Refrigerator's gross volume (Litres)	120.000
Autonomy (hrs:mn)	112.24	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	Optional: Remote temperature monitoring device
List of accessories	Keys, Handle component, 30 days Data logger
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Display - Part No. 0274000357 1 No. Indicator - Part No. 0074000574 1 No. Fan Set - Part No.0274000351 1 No. Compressor BD-35K - Part No. 0274000118A 1 No. Compressor controller (E-Box) - Part No. 0274000118FJ 1 No. Thermostat - Part No. 0274000352 1 No. Main Switch - Part No. 0274000354B 1 No. USB charging port - Part No. 0274000389 1 No. Dry filter - Part No. 0074180002A 1 No. Thermo sensor - Part No. 0274000353 1 No. Thermo sensor - Part No. 0274000358 2 No. Sticker - Part No. 0270501015A Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.44	Shipping weight (kg)	160.00
Incoterms	EXW	Price 1	1-100units USD 3628

Price 2	>100units USD 3550	Year of base price	2021
QUALITY STANDARD			
Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: Applicable PQS VP(s):		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-19-474		
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HTC-240-SDD
IMD-PQS Code:	E003-117
Status:	Prequalified
Date of acceptance:	06 Sep 2020
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HTC-240-SDD
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	1815.00
External dimensions width (mm)	825.00	External dimensions height (mm)	865.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption Intermittent Power (kWh/24h)	0.3500	Energy Consumption Cool Down (kWh/24h)	0.5400

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	200.000	Refrigerator's gross volume (Litres)	240.000
Autonomy (hrs:mn)	95:23	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	Optional: Remote temperature monitoring device
List of accessories	Keys, Handle component, 30 days Data logger
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Display - Part No. 0274000357 1 No. Indicator - Part-0074000574 1 No. Fan Set - Part No.0274000351 1 No. Compressor BD-35K - Part No. 0274000118A 1 No. Compressor controller (E-Box) - Part No. 0274000118FJ 1 No. Thermostat - Part No. 0274000352 1 No. Main Switch - Part No. 0274000354B 1 No. USB charging port - Part No. 0274000389 1 No. Dry filter Part - Part No. 0074180002A 1 No. Thermo sensor - Part No. 0274000353 1 No. Thermo sensor - Part No. 0274000358 2 No. Sticker - Part No. 0270501015A Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.79	Shipping weight (kg)	185.00
Price 1	1-100units USD 4250	Price 2	>100units USD 4187
Year of base price	2021		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: Applicable PQS VP(s):		

VERIFICATION

Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-19-376		

PRODUCT SITES

Organization name	Qingdao Haier Biomedical Co., Ltd
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	ARKTEK YBC-10 SDD
IMD-PQS Code:	E003-118
Status:	Prequalified
Date of acceptance:	20 Oct 2020
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	Qingdao Aucma Global Medical Co.,Ltd.
Manufacturers Reference:	ARKTEK YBC-10 SDD
Country of Manufacture:	China
Address:	315 Qianwangang Road, Economic & Technological Development Zone, Qingdao, China
Telephone:	+86 532 86763602
Email:	lishouda@aucma.com.cn
Website address:	www.aucmamedicalglobal.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Minimum rated ambient temperature (°C)	5.00	Freeze protection	Grade A
External dimensions width (mm)	52.80	External dimensions height (mm)	86.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	PCM	Energy Consumption Cool Down (kWh/24h)	0.3000
Energy Consumption Continuous Power (kWh/24h)	0.2400		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	10.000	Refrigerator's gross volume (Litres)	15.000
Autonomy (hrs:mn)	72:00	Solar radiation ref period (kWh/m2/day)	3.50

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Waterpack freezing capacity (Kg/24 hrs)	0.00	Waterpack storage capacity (Litres)	0.00
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Comments	"The ARKTEK YBC-10 SDD provides safe, solar-powered vaccine storage for health facilities that have minimal or no mains power, and extreme ambient temperatures. It can keeps vaccines cold with no risk of freezing through 3+ day periods with inadequate sunlight. Included 200W PV modules and pole PV mounting rack with 20m wiring and 1.5m ground rod. Included energy harvesting outputs with 5V USB (2A) Integrated 30-day electronic refrigerator temperature logger stores and displays temperature." Range of holdover time: 51 - 100 hours
List of accessories	6 vaccine stacks; documentation;
List of spare parts, Reference & Price	"Thermoelectric cooler 1 EA Electronic control board 1 SET"

PRICE AND SHIPPING

Incoterms	EXW	Price 1	\$3,550
Year of base price	2020		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: PQS/E003/RF05.5 Applicable PQS VP(s): E003/RF05-VP.4		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-19-369		
PRODUCT SITES			
Organization name	Qingdao Aucma Global Medical Co.,Ltd.		
Address	315 Qianwangang Road, Economic &Technological Development Zone, Qingdao, China China		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 076 RF SDD
IMD-PQS Code:	E003-119
Status:	Prequalified
Date of acceptance:	02 Feb 2021
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 076 RF SDD
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	650.00
External dimensions width (mm)	1280.00	External dimensions height (mm)	960.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption During Freezing (kWh/24h)	1.0800	Energy Consumption Intermittent Power (kWh/24h)	0.4330
Energy Consumption Cool Down (kWh/24h)	1.0600	Energy Consumption Continuous Power (kWh/24h)	0.4370

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	61.250	Refrigerator's gross volume (Litres)	111.000
Autonomy (hrs:mn)	89:32	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer's gross volume (Litres)	34.30
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Comments	"Prices include Vestfrost Solutions SDD PV energy system, roof adjustable, plug & play; Unit equipped with unique QR code, that can be used along Vestfrost Solutions Unit tracker APP, containing various installation/service features. As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Range of holdover time: 51 - 100 hours Waterpack freezing capacity: 3 x 0.6 L Waterpacks per/24h Waterpack storage capacity: 29 x 0.6 L Waterpacks
List of accessories	Vaccine storage top basket; Bottom grating; 30 day electronic temperature logger; Self regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages
List of spare parts, Reference & Price	Comporssor (BD35K 101Z0211) 10-45V - 8-036510223 Thermostat refrigerator (Dixell) - 7095178 Thermostat freezer (Ranco) - 6520038 Fan Set refrigerator - 7090403 Fan Set freezer - 7030823 PV Thermometer - 7020392-03

PRICE AND SHIPPING

Shipping volume (m3)	1.15	Shipping weight (kg)	157.00
Incoterms	EXW	Price 1	EUR 5177
Year of base price	2021		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: E003/RF05.6 Applicable PQS VP(s): E003/RF05-VP.6		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk

PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 174A AC
IMD-PQS Code:	E003-120
Status:	Prequalified
Date of acceptance:	27 Apr 2021
Appliance type:	E003
Product description:	Icelined refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 174A AC
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	57:52
External dimensions length (mm)	550.00	External dimensions width (mm)	650.00
External dimensions height (mm)	950.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 115/60Hz;Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Lining	Ice-lined	Energy Consumption Intermittent Power (kWh/24h)	0.4930
Energy Consumption Continuous Power (kWh/24h)	0.5040		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	38.000	Refrigerator's gross volume (Litres)	50.600
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	Appliance requires only 4 hours electricity per 24 hours at +43°C Equipped with unique QR code, that can be used along Vestfrost Solutions Unit tracker APP, containing various installation/service features. Electric components positioned in corrosion free metal junction box, protecting for water, dust intrusion, and eases service/maintenance. For easy customization to local standard plug, supplied with appliance power in-let + Appliance power plug/cable. model is supplied with internal voltage stabilizer for extended input range, incl. high, low, spike and surge protection in line with E007/VS01-VP.5 For 220-240V/50/60Hz, input voltage regulation range 110-278V/50/60Hz For 100-127V/50/60Hz, input voltage regulation range 82-159V/50/60Hz Range of holdover time: 51 - 100 hours Range vaccine storage capacity: 25L - 60L
List of accessories	1 x Vaccine storage baskets; 1 x Bottom grating; 1 x 30 day electronic temperature logger; Self-regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages; Plywood packing/crate

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 X Compressor (HXK80AT Complete) - Part No.8-0365100181 X Thermostat Dixell XR30CH - Part No. 7020900421 X Thermometer, solar, Part No.7020392-031 X Voltage stabilizer controller Part No. 7020475 Other parts are available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	0.63	Shipping weight (kg)	79.00
Incoterms	EXW	Year of base price	2021

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: E003/RF03.5 Applicable PQS VP(s):		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danmark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	Refrigerator 300-KLAB-20-317		

PRODUCT SITES

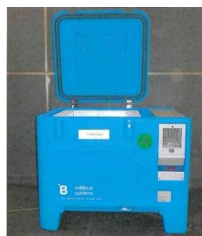
Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW80-SDD
IMD-PQS Code:	E003-121
Status:	Prequalified
Date of acceptance:	06 Jul 2021
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW80-SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Website address:	www.bmedicalsyste.ms.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	192
External dimensions length (mm)	778.00	External dimensions width (mm)	1023.00
External dimensions height (mm)	890.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Solar direct drive	Lining	Ice-lined
Energy Consumption Cool Down (kWh/24h)	0.5800	Energy Consumption Continuous Power (kWh/24h)	0.6000

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	80.500	Refrigerator's gross volume (Litres)	82.500
Autonomy (hrs:mn)	72:21	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A	Waterpack freezing capacity (Kg/24 hrs)	0.00
Waterpack storage capacity (Litres)	0.00		

Comments	Prices include the solar generator system : G1=roof fixes; G2=roof adjustable. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 or 10 years as the case may be. For more information and further conditions of warranty, please contact B Medical Systems
List of accessories	4 vaccine storage baskets lockable lid 2 spacers 1 compass 1 brush

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD35K Solar) - Part No. 296.9702.09 1 No. Electronic Control Unit (E-box) - Part No. 296.9705.32 1 No. Electronic thermostat/controller - Part No. 296.9768.67 1 No. Fan (12V 4.3W 410mm) - Part No. 292.9960.13 1 No. Drier - Part No. 296.0945.04 1 No. Controller display board - Part No. 296.9769.91 1 No. Sensor - Part No. 296.9804.78 Other parts are available as spares on request
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PRICE AND SHIPPING

Shipping volume (m3)	0.88	Shipping weight (kg)	112.00
Incoterms	EXW	Price 1	>100units G1 : 6260€
Price 2	>100units G2 : 6798€	Year of base price	2025

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015, ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF05.6 Applicable PQS VP(s): E003/RF05-VP.6		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 21-01		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	IceVolt 300P
IMD-PQS Code:	E003-122
Status:	Prequalified
Date of acceptance:	14 Jun 2021
Appliance type:	E003
Product description:	Icelined refrigerator
Manufacturer:	Coolfinity Medical B.V.
Manufacturers Reference:	IceVolt 300P
Country of Manufacture:	Netherlands
Address:	Goeman Borgesiuslaan 77 Utrecht Netherlands
Telephone:	+31 85 066 23 64
Email:	maarten@coolfinity.com
Website address:	www.coolfinity.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	10.00
Freeze protection	Grade A	Hold over time (hours:mn)	25:00
External dimensions length (mm)	730.00	External dimensions width (mm)	670.00
External dimensions height (mm)	1999.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz; Electric Mains 115/60Hz	Lining	Ice-lined
Energy Consumption Intermittent Power (kWh/24h)	2.1900	Energy Consumption Cool Down (kWh/24h)	2.2100
Energy Consumption Continuous Power (kWh/24h)	2.9800		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	241.000	Refrigerator's gross volume (Litres)	318.000
Refrigerant type	R290		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A
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Comments	a) The refrigerator has an integrated Sollatek voltage stabiliser as follows: 1. 220 – 240 Volt 50/60 Hz, integrated extended version, Sollatek FSPE4B-2 4.5A/6A 110V-285V 50/60Hz 2. 110 – 127 V 50/60 Hz , integrated extended version, Sollatek FSPE4B-1 4.5A/6A 82V-159V 50/60Hz b) The refrigerator has internal LED lighting that switches on when the door is opened. It also works during power outages. c) The refrigerator has a special glass door, that prevents condensation and fogging on the glass. d) Coolfinity refrigerators have a patented technology for the cooling system. e) The refrigerator requires clean drinking water during installation, please the contact manufacturer or watch the installation video online. f) This appliance was modified in November 2022. This modification consisted of a change of the controller. The appliance was retested and resulted in a slight change in the holdover time and energy consumption. The glass door includes a protective film that blocks >99% of UV light.
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List of accessories	Accessoires included: a) 5x baskets, b) Berlinger Fridge-Tag 2E (30 day temperature recorder), c) filling funnel, d) 2x keys for integrated door lock, e) instruction manual, f) wooden pallet, Optional Accessoires: a) 1x or 2x additional baskets, b) shelves (instead of baskets), c) Berlinger SmartMonitor SITE L, d) wooden crate (12 kg extra shipping weight), e) branding on the refrigerator sides, f) Large LED temperature display in top panel (7cm)
List of spare parts, Reference & Price	UNICEF Supply Division the spare parts kit consists of: Option 1 - 230V/60Hz Version 1 x Evaporator fan (artcle no. 987713) 1 x Controller (artcle no. 6114382) 1 x Battery charger (artcle no. 6114296) 1 x Voltage stabilizer control unit (artcle no. 6114365)

PRICE AND SHIPPING			
Shipping volume (m3)	1.09	Shipping weight (kg)	190.00
Incoterms	FCA	Price 1	50 € 2580
Year of base price	2024		

QUALITY STANDARD			
Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: E003/RF03.5 Applicable PQS VP(s): E003/RF03-VP.4		

VERIFICATION			
Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danemark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-21-106		

PRODUCT SITES			
Organization name	Coolfinity Medical B.V.		
Address	Goeman Borgesiuslaan 77 Utrecht Netherlands		
Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW120AC
IMD-PQS Code:	E003-123
Status:	Prequalified
Date of acceptance:	12 Jun 2021
Appliance type:	E003
Product description:	Combined Vaccine Refrigerator / Waterpack Freezer
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW120AC
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	73:54
External dimensions length (mm)	790.00	External dimensions width (mm)	1620.00
External dimensions height (mm)	910.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	110-240V 50/60Hz	Lining	Ice-lined
Energy Consumption During Freezing (kWh/24h)	1.4100	Energy Consumption Cool Down (kWh/24h)	1.0700
Energy Consumption Continuous Power (kWh/24h)	1.5500		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	120.000	Refrigerator's gross volume (Litres)	153.000
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	1.00

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer net volume		Freezer's gross volume (Litres)	28.00
Waterpack freezing capacity (Kg/24 hrs)	1.60	Waterpack storage capacity (Litres)	13.20

Comments	Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 5 years. For more information and further conditions of warranty, please contact B Medical Systems. Bmedical fully integrated automatic voltage stabilization solution, which operates the ILR for any voltage in between 90VAC and 290VAC. It protects the ILR from over and under voltage as well as from surges and spikes required by PQS for AVS. Freezing capacity range: 5 kg/24h Range vaccine storage capacity: 90L - 150L Waterpack storage capacity: 22 x 0,6L
List of accessories	4 vaccine storage baskets lockable lid 2 spacers 22 waterpacks of 0.6L

List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor BD35K - Part No. 296.9702.09 1 No. E-BOX BD35K Solar - Part No. 296.9705.32 1 No. Electronic Thermostat Controller - Part No. 296.9768.68 1 No. Fan (12V, 4.3W) - Part No. 292.9960.13 1 No. Drier - Part No. 296.0945.04 1 No. Controller Display Board - Part No. 296.9769.91 1 No. Sensor - Part No. 296.9805.06 Other parts available as spares on request.
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PRICE AND SHIPPING

Shipping volume (m3)	1.39	Shipping weight (kg)	188.00
Incoterms	EXW	Price 1	>100 pcs : 4339 Euros
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015, ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/RF03.4 Applicable PQS VP(s):		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafrroid.fr
Verification Report Reference	WHO 21-02		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCW120SDD
IMD-PQS Code:	E003-124
Status:	Prequalified
Date of acceptance:	12 Jun 2021
Appliance type:	E003
Product description:	Vaccine Refrigerator / Ice-pack Freezer
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TCW120SDD
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Website address:	www.bmedicalsyste.ms.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	790.00
External dimensions width (mm)	1620.00	External dimensions height (mm)	910.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Ice-lined	Energy Consumption During Freezing (kWh/24h)	1.3800
Energy Consumption Cool Down (kWh/24h)	1.3100	Energy Consumption Continuous Power (kWh/24h)	1.1500

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	120.000	Refrigerator's gross volume (Litres)	153.000
Autonomy (hrs:mn)	82:05	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer net volume	50 L	Freezer's gross volume (Litres)	28.00
Waterpack freezing capacity (Kg/24 hrs)	1.60	Waterpack storage capacity (Litres)	13.20

Comments	Prices include the solar generator system: G1 = roof fixed; G2 = roof adjustable. Includes for the duration of the warranty period contractually agreed: the B-Medical systems RTMD with worldwide communication; real-time alarms messages for temperature and open door alerts via SMS/Email, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation, as this RTMD has no integrated display. However, the refrigerator does have a digital display. This RTMD is exclusively bundled to B Medical Systems refrigerators/freezers. It includes a warranty for 3 or 10 years. For further information on the warranty please contact B Medical Systems. Waterpack storage capacity: 22 x 0.6L
List of accessories	4 vaccine storage baskets lockable lid 2 spacers 22 waterpacks of 0.6L

List of spare parts, Reference & Price Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor BD35K Solar - Part No. 296.9702.09 1 No. Electronic Control Unit (E-box) - Part No. 296.9705.32 1 No. Electronic Thermostat / Controller - Part No. 296.9768.69 1 No. Fan (12V, 4.3W) - Part No. 292.9960.13 1 No. Driver - Part No. 296.0945.04 1 No. Controller display board - Part No. 296.9769.91 1 No. Sensor - Part No. 296.9805.06 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.39	Shipping weight (kg)	187.00
Incoterms	EXW	Price 1	>100 units: G1 10,222 Euros; G2 11,281 Euros
Year of base price	2025		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: E003 / RF05.6 Applicable PQS VP(s):		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 21-03		

PRODUCT SITES

Organization name	B Medical Systems Sarl
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	U201
IMD-PQS Code:	E003-125
Status:	Prequalified
Date of acceptance:	25 Feb 2022
Appliance type:	E003
Product description:	Vaccine Freezer - Ultralow Temperature Storage
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	U201
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	10.00
Hold over time (hours:mn)	1:48	External dimensions length (mm)	1039.00
External dimensions width (mm)	699.00	External dimensions height (mm)	1293.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - absorption	Energy source	230V 50Hz (Option 220V 60Hz)
Energy Consumption Cool Down (kWh/24h)	27.6000	Energy Consumption Continuous Power (kWh/24h)	13.5000

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	143.000	Refrigerator's gross volume (Litres)	214.000
Refrigerant type	R290/R170	Solar radiation ref period (kWh/m2/day)	1.00

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer net volume	110-200	Freezer's gross volume (Litres)	232.00
Waterpack freezing capacity (Kg/24 hrs)	0.00	Waterpack storage capacity (Litres)	0.00

Comments	Set temperature (setting range): -86°C to -20°C. Defrosting technique: Manual. Includes for the duration of the warranty period contractually agreed: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to WHO PQS E006/TR03.2 with one deviation as this RTMD has no integrated display (however the freezer has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 years. For more information and further conditions of warranty, please contact B Medical Systems. Holdover time: 1h0mins from -82°C to -60°C Freezer vaccine storage capacity: 202 L
List of accessories	1 Separate interior door 1 ST-shelf 4 Smooth castors with stabilizers 1 RTMD (Integrated remote temperature-monitoring device) °B Connected Monitoring Software
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. GASKET KIT – Part No. 294.3300.07; 1 No. DRIER – Part No. 296.0945.05; 1 No. COMPRESSOR NT2210U AC 230V/50HZ – Part No. 296.9701.58; 1 No. FAN MOTOR EBM – Part No. 296.9759.29; 1 No. PRESSOSTAT KP7EW – Part No. 296.9762.05; 1 No. CLIP-BOX SPARE PART COMPRESSOR – Part No. 292.8003.31 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.2	Shipping weight (kg)	252.00
Incoterms	EXW	Price 1	12,114 €
Year of base price	2024		

QUALITY STANDARD

Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 14001:2015
Specification Reference	Applicable PQS specification: E003/ULT01.1 Applicable PQS VP(s): E003/ULT01-VP.1		

VERIFICATION

Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO 21-04		

PRODUCT SITES

Organization name	B Medical Systems Sarl		
Address	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg		
Current PQS status:	Prequalified	Valid until:	31 May 2026

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HBD-86
IMD-PQS Code:	E003-126
Status:	Prequalified
Date of acceptance:	07 Jul 2022
Appliance type:	E003
Product description:	Vaccine/Waterpacks Freezer
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HBD-86
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	0.00
Hold over time (hours:mn)	7:19	External dimensions length (mm)	872.00
External dimensions width (mm)	717.00	External dimensions height (mm)	788.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz	Lining	Regular
Energy Consumption Cool Down (kWh/24h)	0.9800	Energy Consumption Continuous Power (kWh/24h)	0.9500

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	61.000	Refrigerant type	R600a
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PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer's gross volume (Litres)	86.00
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Comments	Optional: Remote temperature monitoring device 1. Display: Solar LED Temperature Display 2. Low power consumption Freezer net volume: 50 - 110 L
List of accessories	1. Instructions 2. Key 3. Handle component 4. Basket 5. Alcohol thermometer 6. 30 days temperature logger
List of spare parts, Reference & Price	"1 No. Dry filter Part-0074180001 2 No. overload protector 0274300008B 1 No. Switch 0075050003 1 No. Thermo sensor-0274000357A 1 No. Thermostat with sensor 0274000352A 1 No. Compressor-0060705994A 1 No. Fan 0074000172 2 No. Indicator 0075050018 2 No. Displayer 0274000357 1 No. Sticker-0270501015B"

PRICE AND SHIPPING

Shipping volume (m3)	0.71	Shipping weight (kg)	90.00
Incoterms	EXW	Price 1	\$977 including 30 DTR
Year of base price	2022		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: E003/FZ01.2 Applicable PQS VP(s): E003/FZ01-VP.2		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-21-0193		
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	Prequalified	Valid until:	31 May 2026

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VFW140H-HC
IMD-PQS Code:	E003-127
Status:	Prequalified
Date of acceptance:	07 Jul 2022
Appliance type:	E003
Product description:	Vaccine/Waterpack Freezer
Manufacturer:	Western Refrigeration Private Limited
Manufacturers Reference:	VFW140H-HC
Country of Manufacture:	India
Address:	7/B, Pannalal Silk Mill Compound, L.B.S. Marg, Bhandup (West), Mumbai 400078. India
Telephone:	+91 22 - 67161200
Email:	paresh@westernequipments.com
Website address:	https://www.westernequipments.com/
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Hold over time (hours:mn)	3:33	External dimensions length (mm)	720.00
External dimensions width (mm)	710.00	External dimensions height (mm)	955.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	220-240V 50Hz
Lining	Regular	Energy Consumption Cool Down (kWh/24h)	2.0600
Energy Consumption Continuous Power (kWh/24h)	1.9400		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	68.000	Refrigerant type	R290
Solar radiation ref period (kWh/m2/day)	1.00		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer's gross volume (Litres)	142.00
Waterpack freezing capacity (Kg/24 hrs)	16.20	Waterpack storage capacity (Litres)	72.50

List of accessories	4 Baskets, keys, Steam Alcohol Thermometer (Optional), Instruction Manual
List of spare parts, Reference & Price	1 No Compressor, 1 No Condensor Fan, 1 No Digital Controller, 1 No Battery for Digital controller, 1 No Transformer for Digital controller, 1 No 2 Pole ON/ OFF switch, 1 No Steam Alcohol Thermometer, 1 No Application Sensor, 1 No Drier and Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	0.6	Shipping weight (kg)	60.00
Incoterms	EXW	Price 1	1 to 99 Units - 635 USD
Price 2	100 to 200 Units- 540 USD	Year of base price	2022

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015
Specification Reference	Applicable PQS specification: E003/FZ01.2 Applicable PQS VP(s): E003/FZ01-VP.2		

VERIFICATION

Verification Laboratory	UL India Private Limited	Address	A-12, Infocity-1, Sector-34, Gurgaon (Haryana)-122001 India
Phone	+91-8130427334	Email	satish.kumar@ul.com
Verification Report Reference	4789971136-01-OTHERS-S1-R1		

PRODUCT SITES

Organization name	Western Refrigeration Private Limited
Address	Survey No 633, 635, 636, 647, 654, 707, 726, 732, 741, 747, 748, and 752 At. Village Tadgam, Tal. Umbergaon, Dist. Valsad, Gujrat, 396135 . India

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VFW310H-HC
IMD-PQS Code:	E003-128
Status:	Prequalified
Date of acceptance:	07 Jul 2022
Appliance type:	E003
Product description:	Vaccine/Waterpacks Freezer
Manufacturer:	Western Refrigeration Private Limited
Manufacturers Reference:	VFW310H-HC
Country of Manufacture:	India
Address:	7/B, Pannalal Silk Mill Compound, L.B.S. Marg, Bhandup (West), Mumbai 400078. India
Telephone:	+91 22 - 67161200
Email:	paresh@westernequipments.com
Website address:	https://www.westernequipments.com/
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Hold over time (hours:mn)	4:00	External dimensions length (mm)	720.00
External dimensions width (mm)	1230.00	External dimensions height (mm)	965.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50Hz
Lining	Regular	Energy Consumption Cool Down (kWh/24h)	2.3200
Energy Consumption Continuous Power (kWh/24h)	2.2700		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	166.000	Refrigerant type	R290
Solar radiation ref period (kWh/m2/day)	1.00		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	Low energy compression	Freezer's gross volume (Litres)	317.00
Waterpack freezing capacity (Kg/24 hrs)	28.20	Waterpack storage capacity (Litres)	203.00

Comments	Holdover time: 4 hours
List of accessories	8 Baskets, keys, Steam Alcohol Thermometer (Optional), Instruction Manual
List of spare parts, Reference & Price	1 No Compressor, 1 Condensor motor, 1 No Digital Controller, 1 No Battery for Digital controller, 1 No Transformer for Digital controller, 1 No 2 Pole ON/ OFF switch, 1 No Steam Alcohol Thermometer, 1 No Application Sensor, 1 No Drier and Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.03	Shipping weight (kg)	91.00
Incoterms	EXW	Price 1	1 to 99 Units - 775 USD
Price 2	100 to 200 Units- 685 USD	Year of base price	2022

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015
Specification Reference	Applicable PQS specification: E003/FZ01.2 Applicable PQS VP(s): E003/FZ01-VP.2		

VERIFICATION

Verification Laboratory	UL India Private Limited	Address	A-12, Infocity-1, Sector-34, Gurgaon (Haryana)-122001 India
Phone	+91-8130427334	Email	satish.kumar@ul.com
Verification Report Reference	4789971136-01-OTHERS-S2-R1		

PRODUCT SITES

Organization name	Western Refrigeration Private Limited
Address	Survey No 633, 635, 636, 647, 654, 707, 726, 732, 741, 747, 748, and 752 At. Village Tadgam, Tal. Umbergaon, Dist. Valsad, Gujrat, 396135 . India

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TCD-100
IMD-PQS Code:	E003-129
Status:	Prequalified
Date of acceptance:	14 Sep 2022
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator & Freezer
Manufacturer:	Qingdao Aucma Global Medical Co.,Ltd.
Manufacturers Reference:	TCD-100
Country of Manufacture:	China
Address:	315 Qianwangang Road, Economic & Technological Development Zone, Qingdao, China China
Telephone:	+86 532 86763602
Email:	lishouda@aucma.com.cn
Website address:	www.aucmamedicalglobal.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	750.00
External dimensions width (mm)	1050.00	External dimensions height (mm)	975.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Lining	Ice-lined
Energy Consumption During Freezing (kWh/24h)	1.9950	Energy Consumption Cool Down (kWh/24h)	1.2060
Energy Consumption Continuous Power (kWh/24h)	1.4100		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	48.000	Refrigerator's gross volume (Litres)	59.000
Autonomy (hrs:mn)	180	Refrigerant type	R290
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer's gross volume (Litres)	38.00	Waterpack freezing capacity (Kg/24 hrs)	2.00
Waterpack storage capacity (Litres)	10.70		

Comments	1. 48-liter vaccine storage chamber volume; 38-liter water pack freezer chamber volume; 2. Integrated USB temperature data module with 10 year data storage capacity; 3. 180 hours of holdover at constant ambient temperature of 43 °C; 4. 2.0kg daily Water-pack freezing capacity, 10.7kg water-pack storage compartment capacity; 5. 180 hours autonomy at constant ambient temperature of 43 °C; 6. Integrated maximum/minimum temperature and alarm data with 30 day history; 7. Integrated USB charging port 5V / 0.5A;
List of accessories	1. 2 Vaccine boxes 2. 2 Keys 3. 1 Funnel 4. Documentation 5. 2 baskets
List of spare parts, Reference & Price	3000001485 Compressor 283 USD 3000002307 DC fan 26 USD 3001000717 Electronic control unit 68 USD"

PRICE AND SHIPPING

Shipping volume (m3)	1.62	Shipping weight (kg)	260.00
Incoterms	EXW	Year of base price	2022
QUALITY STANDARD			
Quality Standard	Other	Quality standard (Other)	ISO 9001:2015
Specification Reference	Applicable PQS specification: Applicable PQS VP(s):		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-21-0332		
PRODUCT SITES			
Organization name	Qingdao Aucma Global Medical Co.,Ltd.		
Address	315 Qianwangang Road, Economic &Technological Development Zone, Qingdao, China China		
Current PQS status:	Prequalified	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	GMF 200 ECO lite
IMD-PQS Code:	E003-130
Status:	Prequalified
Date of acceptance:	10 May 2022
Appliance type:	E003
Product description:	Vaccine/waterpaks freezer
Manufacturer:	Godrej & Boyce MFG. Co. Ltd.
Manufacturers Reference:	GMF 200 ECO lite
Country of Manufacture:	India
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India India
Telephone:	+91 22 67966423
Email:	pratika@godrej.com
Website address:	http://www.godrejappliances/medical
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Hold over time (hours:mn)	9:49
External dimensions length (mm)	850.00	External dimensions width (mm)	825.00
External dimensions height (mm)	762.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz
Lining	PCM	Energy Consumption Cool Down (kWh/24h)	4.2100
Energy Consumption Continuous Power (kWh/24h)	4.1300		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	153.000	Refrigerant type	R290
Solar radiation ref period (kWh/m2/day)	1.00		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A	Waterpack freezing capacity (Kg/24 hrs)	16.80
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Comments	Waterpack freezing capacity: 16.8kg/24hou Waterpack storage capacity: 130.8kg
List of accessories	3 baskets, lock and key, Fridge Tag 2E with external sensor, Solar Display Thermometer, Voltage Stabilizer (110V-280V) Optional (charged extra): RTMD (E006-036)
List of spare parts, Reference & Price	1) Compressor 2) Electronic Controller 3) Condenser 4) Fan Motor 5) Capacitor

PRICE AND SHIPPING

Shipping volume (m3)	0.78	Shipping weight (kg)	95.00
Incoterms	EXW	Price 1	\$1000 (1-9 units)
Price 2	\$980 (10-99 units)	Year of base price	2023

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
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Specification Reference	Applicable PQS specification: Applicable PQS VP(s): E003/FZ01-VP.2
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VERIFICATION

Verification Laboratory	0013X00004MI8OaQAJ
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PRODUCT SITES

Organization name	Godrej & Boyce MFG. Co. Ltd.
Address	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India India

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HBD265
IMD-PQS Code:	E003-131
Status:	Prequalified
Date of acceptance:	23 Mar 2023
Appliance type:	E003
Product description:	Combined icelined refrigerator/waterpacks freezer
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HBD265
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	0.00
Hold over time (hours:mn)	11:25	External dimensions length (mm)	940.00
External dimensions width (mm)	717.00	External dimensions height (mm)	1647.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz	Energy Consumption During Freezing (kWh/24h)	1.4000
Energy Consumption Continuous Power (kWh/24h)	1.4200		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	211.000	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	1.00		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer's gross volume (Litres)	265.00
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Comments	Optional: Remote temperature monitoring device 1. Display: Solar LED Temperature Display 2. Low power consumption
List of accessories	1. Instructions 2. Key 3. Handle component 4. Basket 5. Alcohol thermometer 6. 30 days temperature logger
List of spare parts, Reference & Price	"1 No. Dry filter Part-0074180001 2 No. overload protector 0274300008B 1 No. Switch 0075050003 1 No. Thermo sensor-0274000357A 1 No. Thermostat with sensor 0274000352A 1 No. Compressor-0060705994A 1 No. Fan 0074000172 2 No. Indicator 0075050018 2 No. Displayer 0274000357 1 No. Sticker-0270501015B"

PRICE AND SHIPPING

Shipping volume (m3)	1.4	Shipping weight (kg)	160.00
Price 1	USD 1313	Year of base price	2023

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: Applicable PQS VP(s):		
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-22-0203		
PRODUCT SITES			
Organization name	Qingdao Haier Biomedical Co., Ltd		
Address	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China		
Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	VLS 096A RF SDD
IMD-PQS Code:	E003-132
Status:	Prequalified
Date of acceptance:	16 Mar 2023
Appliance type:	E003
Product description:	Solar Direct Drive Refrigerator
Manufacturer:	Vestfrost Solutions
Manufacturers Reference:	VLS 096A RF SDD
Country of Manufacture:	Denmark
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark
Telephone:	+45 7914 2527
Email:	clc@vestfrostsolutions.com
Website address:	http://vestfrostsolutions.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	Hold over time (hours:mn)	114,33
External dimensions length (mm)	740.00	External dimensions width (mm)	1510.00
External dimensions height (mm)	870.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Solar direct drive
Lining	Ice-lined	Energy Consumption During Freezing (kWh/24h)	1.4890
Energy Consumption Intermittent Power (kWh/24h)	1.3520	Energy Consumption Cool Down (kWh/24h)	1.3520
Energy Consumption Continuous Power (kWh/24h)	1.4100		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	110.000	Refrigerator's gross volume (Litres)	147.000
Autonomy (hrs:mn)	114.33	Refrigerant type	R600a
Solar radiation ref period (kWh/m2/day)	3.50		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer's gross volume (Litres)	50.00	Waterpack freezing capacity (Kg/24 hrs)	2.40
Waterpack storage capacity (Litres)	16.80		

Comments	Prices include Vestfrost Solutions SDD PV energy system, roof adjustable, plug & play; Unit equipped with unique QR code, that can be used along Vestfrost Solutions Unit tracker APP, containing various installation/service features. As an option the appliance can be supplied with Vestfrost in-built RTMD; with following features: 1: 5" touch display 2: 3X internal temp. sensors 3: ambient temp. 4: compressor sensor 5: humidity sensor 6: lid opening alarm 7: GPS coordinates via Google maps 8: 1X USB 5V solar harvesting port. All data collected/logged is automatic via GPRS uploaded to Vestfrost RTMD performance data-portal, and/or can be accessed onsite from the touch screen menu. Waterpack freezing capacity: 2.4 kg per/24h = 4 x 0.6 L Waterpacks per/24h Waterpack storage capacity: 28 x 0.6L
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List of accessories	2 X Vaccine storage top basket; Bottom grating; 30 day electronic temperature logger; Self regulating temperature control; Electronic temperature reading; 2 x Keys; Instruction manual in 6 UN languages; Technical manual in 6 UN languages
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 No. Compressor (BD 35K) Complete R600a Incl. ECU - Part No. 8-036510223 1 No. Thermostat refrigerator - Part No. 7095714 1 No. Thermostat freezer – Part No. 7095715 1 No. Fan Set (KD1208PTB3) 12 V DC Part No. 7030823 1 No. Thermometer, solar, Part No.7020392-03 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.31	Shipping weight (kg)	190.00
Incoterms	EXW	Price 1	6.485 EUR
Year of base price	2023		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
Specification Reference	Applicable PQS specification: Applicable PQS VP(s):		

VERIFICATION

Verification Laboratory	Danish Technological Institute	Address	Gregersensvej DK-2630 Taastrup Danmark Denmark
Phone	+45 72202472	Email	hans.walloe@teknologisk.dk
Verification Report Reference	300-KLAB-22-106		

PRODUCT SITES

Organization name	Vestfrost Solutions
Address	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark Denmark

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	I425H120
IMD-PQS Code:	E003-133
Status:	Prequalified
Date of acceptance:	08 Jul 2023
Appliance type:	E003
Product description:	Icelined refrigerator
Manufacturer:	Western Refrigeration Private Limited
Manufacturers Reference:	I425H120
Country of Manufacture:	India
Address:	7/B, Pannalal Silk Mill Compound, L.B.S. Marg, Bhandup (West), Mumbai 400078. India
Telephone:	+91 22 - 67161200
Email:	paresh@westernequipments.com
Website address:	https://www.westernequipments.com/
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Multizone	Minimum rated ambient temperature (°C)	10.00
Freeze protection	Grade A	Hold over time (hours:mn)	42:30
External dimensions length (mm)	805.00	External dimensions width (mm)	1320.00
External dimensions height (mm)	970.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Lining	Ice-lined
Energy Consumption Cool Down (kWh/24h)	1.4500	Energy Consumption Continuous Power (kWh/24h)	1.5000

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	192.000	Refrigerator's gross volume (Litres)	253.000
Refrigerant type	R290		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Freezer type	N/A	Waterpack freezing capacity (Kg/24 hrs)	0.00
Waterpack storage capacity (Litres)	0.00		

List of accessories	keys, 30 day Temperature data logger, Voltage Stabilizer and Instruction Manual
List of spare parts, Reference & Price	1 No Compressor, 1 No Condensor Fan, 1 No Evaporator Fan, 1 No Digital Controller, 1 No Battery for Digital controller, 1 No Transformer for Digital controller, 1 No 2 Pole ON/ OFF switch, 1 No 30 day temperature data logger, 1 Door Switch, 1 No Application Sensor, 1 Power cord, 1 Buzzer, 1 No Drier, 1 No Stabilizer and Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.24	Shipping weight (kg)	135.00
Price 1	1 to 99 Units - 1550 USD	Price 2	100 to 200 Units- 1420 USD
Year of base price	2023		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2015
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VERIFICATION

Verification Laboratory	UL India Private Limited	Address	A-12, Infocity-1, Sector-34, Gurgaon (Haryana)-122001 India
Phone	+91-8130427334	Email	satish.kumar@ul.com
Verification Report Reference	4790194057-01-OTHER-S1		

PRODUCT SITES

Organization name	Western Refrigeration Private Limited
Address	Survey No 633, 635, 636, 647, 654, 707, 726, 732, 741, 747, 748, and 752 At. Village Tadgam, Tal. Umbergaon, Dist. Valsad, Gujrat, 396135 . India

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 Dec 2025</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	Emvolio Plus
IMD-PQS Code:	E003-134
Status:	Prequalified
Date of acceptance:	26 Sep 2023
Appliance type:	E003
Product description:	Transportable, powered vaccine storage appliances
Manufacturer:	BlackFrog Technologies Private Limited
Manufacturers Reference:	Emvolio Plus
Country of Manufacture:	India
Address:	#4, 4th Floor, Advanced Research Center, Behind MMMC, Madhav Nagar, Manipal, Karnataka, India - 576104 India
Telephone:	+918202572478
Email:	sales@blackfrog.in
Website address:	http://blackfrog.in/
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	10.00
Freeze protection	Grade A	Hold over time (hours:mn)	12
External dimensions length (mm)	300.00	External dimensions width (mm)	200.00
External dimensions height (mm)	410.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric- Thermoelectric
Energy source	110-240V 50/60Hz	Energy Consumption Cool Down (kWh/24h)	0.9000
Energy Consumption Continuous Power (kWh/24h)	0.8400		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	1.550	Refrigerator's gross volume (Litres)	1.800
Refrigerant type	Cable		

Comments	AC use only. Emvolio is a portable battery-powered active cooled vaccine carrier with an in-built temperature control and regulation. The system is able to store and carry vaccines to remote locations with temperature accountability to retain vaccine effectiveness. a.) The refrigerator comes with a custom-designed backpack that can be easily worn by a health worker or even motorcycle mounted. b.) The refrigerator has an in-built GSM-based IoT system that tracks live vital statistics like temperatures (multiple sensors inside, ambient), location and door opening. This is available for access via an online dashboard that is provided free for the first year's use with the product, following which a yearly subscription charge will be levied for use. Customer supplies SIM card and SMS gateway services. c.) Battery Independence time: 12 HRS 18min
List of accessories	Included in price: - Multipurpose Backpack. - User Manual with warranty terms. - Reset Pin. - 150 W Charger/Adaptor. - Power cord. Optional(Charged extra): - Silicon vial-holder multi-stage (slot size to be determined by the user).
List of spare parts, Reference & Price	- Latch. - Latch Hook. - Hinge Right side. - Hinge Left side. - M3*6. - M3*12. - M4*8. - M3*8. - Charging Port. - Rechargeable Li-Ion Battery. - Silicon Gasket

PRICE AND SHIPPING

Shipping volume (m3)	0.719	Shipping weight (kg)	11.00
Incoterms	EXW	Price 1	USD 2500 for 1-100 units
Price 2	USD 2400 for 101-500 units	Price 3	USD 2250 for 500+ units

Year of base price	2023		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015
VERIFICATION			
Verification Laboratory	0013X00004MI8OaQAJ	Verification Report Reference	CE-JOB-NDA-22-000949-001
PRODUCT SITES			
Organization name	BlackFrog Technologies Private Limited		
Address	#4, 4th Floor, Advanced Research Center, Behind MMMC, Madhav Nagar, Manipal, Karnataka, India - 576104 India		
Current PQS status:	Prequalified	Valid until:	31 May 2026

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	HTCD-160B
IMD-PQS Code:	E003-135
Status:	Prequalified
Date of acceptance:	20 Nov 2023
Product description:	Solar direct drive combined refrigerator/freezer
Manufacturer:	Qingdao Haier Biomedical Co., Ltd
Manufacturers Reference:	HTCD-160B
Country of Manufacture:	China
Address:	No.280 Fengyuan Road High-tech Zone Qingdao Shandong China
Telephone:	+86-15066227057
Email:	tianhui.yu@haierbiomedical.com
Website address:	http://www.haiermedical.com
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Freeze protection	Grade A	External dimensions length (mm)	865.00
External dimensions width (mm)	825.00	External dimensions height (mm)	1695.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Energy source	Solar direct drive		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator's gross volume (Litres)	40.000	Autonomy (hrs:mn)	139
Refrigerant type	R600a	Solar radiation ref period (kWh/m2/day)	3.50

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Waterpack freezing capacity (Kg/24 hrs)	2.00	Waterpack storage capacity (Litres)	22.40
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Comments	"1. Display: Solar LED Temperature Display 2. Low power consumption" For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex Energy consumption, cool 1.1 Energy consumption during and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier down test (kWh/24 hours): freezing: of the solar energy system at the time of ordering. Optional: Remote temperature monitoring device
List of accessories	2 shelves; 2 padlocks; Instruction manual; Water injection device; Water preservative
List of spare parts, Reference & Price	"2 No. Display-0274000357 1 No. Thermostat-0274000352 1 No. Fan Set Part-0274000351 1 No. Compressor BD-35K-0274000118A 1 No. Main Switch-0274000354B 1 No. Capacitor-0274000393 1 No. USB charging port-0274000389 2 No. Dry filter Part-0060703262 1 No. Thermo sensor-0274000358 1 No. Thermo sensor-0274000357A 1 No. Thermo sensor-0274000353 2 No. Sticker-0270501015 2 No. Indicator Part-0074000574 1 No. Compressor controller (E-Box) Part-0274000118FJ"

PRICE AND SHIPPING

Shipping volume (m3)	1.69	Shipping weight (kg)	186.00
Year of base price	2023		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
VERIFICATION			
Verification Laboratory	CHEARI	Address	#29 Xia Jie Street, Xuan Wu district Beijing 100053 R. P. de Chine China
Phone	+86 1063162443	Email	gongcx@cheari.com
Verification Report Reference	WB-23-0101		
Current PQS status:	<i>Prequalified</i>	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	GHR 200 AC
IMD-PQS Code:	E003-136
Status:	Prequalified
Date of acceptance:	06 Dec 2023
Product description:	Icelined refrigerator
Manufacturer:	Godrej & Boyce MFG. Co. Ltd.
Manufacturers Reference:	GHR 200 AC
Country of Manufacture:	India
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India India
Telephone:	+91 22 67966423
Email:	pratika@godrej.com
Website address:	http://www.godrejappliances/medical
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Minimum rated ambient temperature (°C)	10.00	Freeze protection	Grade A
Hold over time (hours:mn)	34.59	External dimensions length (mm)	846.00
External dimensions width (mm)	1260.00	External dimensions height (mm)	847.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - absorption
Energy source	Electric Mains 220-240V 50/60Hz	Energy Consumption Continuous Power (kWh/24h)	1.6700

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	226.400	Refrigerator's gross volume (Litres)	287.000
List of accessories	"Baskets, lock and key, Fridge Tag 2E with internal sensor, Solar Display Thermometer, Voltage Stabilizer (110V-280V)"		
List of spare parts, Reference & Price	1) Compressor 2) Electronic Controller 3) Condenser 4) Fan Motor 5) Capacitor		

PRICE AND SHIPPING

Shipping volume (m3)	1.25	Shipping weight (kg)	158.00
Incoterms	EXW	Price 1	Price 1 (Range 1-99 units) - USD1400
Price 2	Price 2 (Range 100-199 units) - USD1400	Price 3	Price 3 (Range 200+ units) - USD1372
Year of base price	2023		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
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VERIFICATION

Verification Laboratory	0013X00004MI8OaQAJ	Verification Report Reference	CE-JOB-NDA-23-000594-004
Current PQS status:	<i>Prequalified</i>	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	GHR 90 AC
IMD-PQS Code:	E003-137
Status:	Prequalified
Date of acceptance:	15 Dec 2023
Product description:	Icelined refrigerator
Manufacturer:	Godrej & Boyce MFG. Co. Ltd.
Manufacturers Reference:	GHR 90 AC
Country of Manufacture:	India
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India India
Telephone:	+91 22 67966423
Email:	pratika@godrej.com
Website address:	http://www.godrejappliances/medical
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	10.00
Freeze protection	Grade A	External dimensions length (mm)	846.00
External dimensions width (mm)	762.00	External dimensions height (mm)	847.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz
Energy Consumption Continuous Power (kWh/24h)	1.6400		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	103.500	Refrigerator's gross volume (Litres)	136.000
Refrigerant type	#R290		
List of accessories	"Baskets, lock and key, Fridge Tag 2E with internal sensor, Solar Display Thermometer, Voltage Stabilizer (110V-280V)"		
List of spare parts, Reference & Price	1) Compressor 2) Electronic Controller 3) Condenser 4) Fan Motor 5) Capacitor		

PRICE AND SHIPPING

Shipping volume (m3)	0.78	Shipping weight (kg)	100.00
Incoterms	EXW	Price 1	USD 1000
Price 2	USD 1000	Price 3	USD 980
Year of base price	2023		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
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VERIFICATION

Verification Laboratory	0013X00004MI8OaQAJ	Verification Report Reference	CE-JOB-NDA-23-000594-004
Current PQS status:	<i>Prequalified</i>	Valid until:	31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	TVW4000AC
IMD-PQS Code:	E003-138
Status:	Prequalified
Date of acceptance:	16 Jan 2024
Appliance type:	E003
Product description:	Vaccine/waterpacks freeze
Manufacturer:	B Medical Systems Sarl
Manufacturers Reference:	TVW4000AC
Country of Manufacture:	Luxembourg
Address:	17 Op der Hei L-9809 Hosingen Luxembourg Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Website address:	www.bmedicalsistemas.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	5.00
Hold over time (hours:mn)	50:09	External dimensions length (mm)	780.00
External dimensions width (mm)	915.00	External dimensions height (mm)	1600.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Fuel and refrigeration cycle	Electric - compression	Energy source	Electric Mains 220-240V 50/60Hz
Energy Consumption During Freezing (kWh/24h)	4.4500	Energy Consumption Cool Down (kWh/24h)	4.0600
Energy Consumption Continuous Power (kWh/24h)	4.4500		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	240.000	Refrigerator's gross volume (Litres)	249.000
Refrigerant type	R290		

PRODUCT SPECIFICATIONS - ADDITIONAL FREEZER

Waterpack storage capacity (Litres)	252.00
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Comments	Optionally available: the B Medical Systems RTMD with worldwide communication, real time alarms messages for temperature and open door alerts via SMS / EMAIL, GPS position using Google Maps, access to the webserver performance monitoring; compliant to all requirements of the WHO PQS E006/TR03.2 except for the LCD display (however the refrigerator has a digital display). This RTMD is exclusively bundled to B Medical Systems refrigerators / freezers. Includes warranty for 3 years. For more information and further conditions of warranty, please contact B Medical Systems. Optionally available in 115V/60Hz Waterpack freezing capacity 24KG / 15HRS
List of accessories	6 baskets, 2 keys, condenser cleaning brush, documentation
List of spare parts, Reference & Price	Included in the UNICEF Supply Division spare parts kit: 1 Controller TVW 4000 AC296.9769.93 1 Run Capacitor 296.9706.63 1 Fan 292.9960.18 1 Compressor 220-240V 296.9701.63 1 Sensor 296.9805.06 1 Starting Relay 296.9706.62 Other parts are available as spares on request.

PRICE AND SHIPPING

Shipping volume (m3)	1.39	Shipping weight (kg)	124.00
Incoterms	EXW	Price 1	4377 Euros

Year of base price	2025		
QUALITY STANDARD			
Quality Standard	ISO 13485;Other	Quality standard (Other)	ISO 9001:2015; ISO 140021:2015
VERIFICATION			
Verification Laboratory	CEMAFROID SAS	Address	5 Avenue des Pres CS 20029 F94 266 Fresnes Cedex France France
Phone	+33 1 49 84 84 84	Email	gerald.cavalier@cemafroid.fr
Verification Report Reference	WHO23-02		
Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	GHR 150 AC
IMD-PQS Code:	E003-139
Status:	Prequalified
Date of acceptance:	25 Jan 2024
Appliance type:	Icelined refrigerator
Product description:	Icelined refrigerator
Manufacturer:	Godrej & Boyce MFG. Co. Ltd.
Manufacturers Reference:	GHR 150 AC
Country of Manufacture:	India
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India India
Telephone:	+91 22 67966423
Email:	pratika@godrej.com
Website address:	http://www.godrejappliances/medical
Valid until:	31 Dec 2025

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	10.00
Freeze protection	Grade A	Hold over time (hours:mn)	40.22
External dimensions length (mm)	842.00	External dimensions width (mm)	845.00
External dimensions height (mm)	1010.00	Appliance tested at (°C)	43.00
Performance at" (°C)	43.00	Fuel and refrigeration cycle	Electric - compression
Energy source	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional	Energy Consumption Cool Down (kWh/24h)	1.6800
Energy Consumption Continuous Power (kWh/24h)	1.7700		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	164.500	Refrigerator's gross volume (Litres)	210.000
Refrigerant type	#R290		
List of accessories	Baskets, lock and key, Fridge Tag 2E with internal sensor, Solar Display Thermometer, Voltage Stabilizer (110V-280V)		
List of spare parts, Reference & Price	1) Compressor 2) Electronic Controller 3) Condenser 4) Fan Motor 5) Capacitor		

PRICE AND SHIPPING

Shipping volume (m3)	1.02	Shipping weight (kg)	133.20
Incoterms	EXW	Price 1	USD 1,150.00 (1-99 units)
Price 2	USD 1,127.00 (100 -199 units)	Price 3	USD 1,104.00 (200+)
Year of base price	2024		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
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VERIFICATION

Verification Laboratory	0013X00004Ml8OaQAJ	Verification Report Reference	CE-JOB-NDA-23-000594-003
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Current PQS status:

Prequalified

Valid until:

31 Dec 2025

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	Indigo 201
IMD-PQS Code:	E003-140
Status:	Prequalified
Date of acceptance:	15 Jul 2024
Product description:	Transportable vaccine storage device
Manufacturer:	EMK TEC GmbH
Manufacturers Reference:	Indigo 201
Country of Manufacture:	Germany
Telephone:	+49 (34652) 670207
Website address:	https://emk-tec.com
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Minimum rated ambient temperature (°C)	10.00	Freeze protection	Grade A
Hold over time (hours:mn)	120	External dimensions length (mm)	355.00
External dimensions width (mm)	482.50	External dimensions height (mm)	355.00
Appliance tested at (°C)	43.00	Performance at" (°C)	43.00
Energy source	Electric Mains 220-240V 50/60Hz		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	1.700	Refrigerator's gross volume (Litres)	2.000
Refrigerant type	Water		

Comments	<p>"There are two components in the Indigo system: the transportable 201 Vaccine Carrier and the stationary C1 Charger. The vaccine carrier has features and capabilities that extend the reach of immunization programs. • Extended cooling: Provides vaccine-safe storage temperatures for five days of continuous use at 10 to 43 °C ambient temperature, without external power. • Freeze-free: Prevents vaccine exposure to freezing temperatures without action from the user. • On/off switch: The five-day cold life of a charged vaccine carrier may be stored until needed. • Safe: Contains no harmful materials or refrigerants. • Portable: Transportable by car, motorcycle, or on foot. • Reusable and durable with two year warranty The charger restores the cooling capacity of the vaccine carrier after use. It is engineered to perform in the most challenging power environments. An operating range from 110VAC to 278VAC creates adaptability across infrastructures, while a suite of voltage stabilization features protects against damage and underperformance. For a single charge, the C1 Charger has a 4 hour charge cycle drawing 900 W for the first 2 hours and 100 W for the last 2 hours totaling 2 kWh of energy per charge. After the charge is complete the transportable Indigo Vaccine Carrier can be stored until ready for use and needs no additional power input to provide its five days of cold life. A single charger supports multiple vaccine carriers. Changes in geography, fuel cost, and staffing costs can drive the optimal carrier-to-charger ratio for a specific deployment as low as 4:1 or as high as 20:1. Sample weight is 8.8 kg. Visit www.indigocold.org to learn more. Shipping volume: Carrier: 0.08 m3; Charger0.18m3 Shipping weight: 11 kg; Charger 34kg</p>		
List of accessories	English/French manuals, No. 1 Phillips screwdriver, VaroTM OTG Adaptor		
List of spare parts, Reference & Price	For every 50 transportable vaccine carriers purchased, we recomend 1 set of vaccine carrier spare parts (cooler, lid, and bag).		

PRICE AND SHIPPING

Shipping volume (m3)	0.026	Shipping weight (kg)	45.00
Incoterms	EXW	Price 1	carrier: USD1,450 ; charger: USD 2,900
Year of base price	2024		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 9001:2008
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VERIFICATION

Verification Laboratory	Re/Gent B.V	Address	Lage Dijk 22 Netherlands
Phone	+31492 476365	Email	patrick.beks@re-gent.nl
Verification Report Reference	22437/EK02/V1		

Current PQS status:	<i>Prequalified</i>	Valid until:	<i>31 May 2026</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003: Refrigerators and freezers



Product name:	SC-DF25P Deep FreezerP
IMD-PQS Code:	E003-141
Status:	Prequalified
Date of acceptance:	01 Oct 2024
Product description:	Vaccine Freezer
Manufacturer:	Twinbird Corporation
Manufacturers Reference:	SC-DF25P Deep FreezerP
Country of Manufacture:	Japan
Telephone:	+81 33663-8774
Email:	takeshi_suzuki@twinbird.co.jp
Website address:	https://www.twinbird.jp/fpsc_en/
Valid until:	31 May 2026

Specifications

PRODUCT SPECIFICATIONS - MAIN

Climate zone	Hot	Minimum rated ambient temperature (°C)	0.00
Hold over time (hours:mn)	78	External dimensions length (mm)	350.00
External dimensions width (mm)	460.00	External dimensions height (mm)	695.00
Performance at" (°C)	43.00	Energy source	110-240V 50/60Hz
Energy Consumption Continuous Power (kWh/24h)	1.0100		

PRODUCT SPECIFICATIONS - ADDITIONAL REFRIGERATOR

Refrigerator vaccine storage capacity(L)	15.000	Refrigerator's gross volume (Litres)	15.000
Comments	Stationary freezer, Light weight:16.5kg, Small size, Low power consumption, Recycled parts: Temperature logger(Temperature logger has an built-in battery.) Operate with E007 Single Phase Voltage Stabilizer.		
List of accessories	U-Cool:Temperature logger, U-Cool-1:Temp. logger Data cable, SC-AD70B:AC adapter, SC-AD70B-1:Power cable, SC-DF25P-1:Inner lid, SC-DF25-8:Mat, C-1572:Pad lock, SC-DF25P-155:Instruction manual,		
List of spare parts, Reference & Price	U-Cool:Temperature logger, U-Cool-1:Temp. logger Data cable, SC-AD70B:AC adapter, SC-AD70B-1:Power cable, SC-DF25M-1:Inner lid, SC-DF25-8:Mat, C-1572:Pad lock, SC-DF25P-155:Instruction manual, SC-C925-41:Lid packing inner, SC-C925-40:Lid packing outer, SC-C925-17:Air inlet Filter, C-30-MR6:Masking rivet,		

PRICE AND SHIPPING

Shipping volume (m3)	0.2	Shipping weight (kg)	22.00
Incoterms	EXW	Price 1	USD 2900
Year of base price	2024		

QUALITY STANDARD

Quality Standard	Other	Quality standard (Other)	ISO 14001; ISO 9001:2015
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VERIFICATION

Verification Laboratory	TUV SUD PSB Pte Ltd	Address	15 International Business Park TÜV SÜD @ IBP Singapore 609937 Singapore
Phone	+6569736355	Email	xin-pei.kee@tuvsud.com
Verification Report Reference	7191313298-EEC23		

Current PQS status:

Prequalified

Valid until:

31 May 2026

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.