PRODUCT OVERVIEW

VC110SDD

110 litre capacity Hot Zone Rated & WHO pre-qualified solar direct drive vaccine refrigerator.

A bespoke design for use in the cold chain – the result of over 30 years experience gained in supplying solar refrigerators to the most remote corners of the earth.

Features & Benefits

- 110 litre vaccine storage capacity
- +5°C to +43°C extended operating temperature range
- Works at WHO solar reference period 3.5kWh/m²/24h
- 91hr 39min holdover at +43°C
- 78hr 09min autonomy at +43°C
- Corrosion tested to DIN 8985
- In-built handle with lock
- In-built solar powered temperature display
- All-metal, high strength hinges
- Heavy duty castors to make handling easier
- User-independent Grade A freeze protection
- Completely battery free, with plug and play connectors for easy installation
- Environmentally friendly: R600a refrigerant with low global warming potential and innovative insulation technology, giving exceptional energy efficiency
- Packaging tested to industry standards
- Tested to survive ambient storage temperatures up to +70°C
- Stacking baskets for easy-access stock management
- British made
- CFC-free

Integrated Solar Socket for mobile phone charging and/or temperature monitoring available according to customer requirements.

*Product and application images for illustration purpose only.
VC110SDD Technical Specifications

**Performance**

- Net vaccine storage capacity: 110 litre
- Climate zone: Hot zone (+43°C)
- Minimum rated ambient temperature: +5°C
- Holdover time: 91hr 39min at +43°C
- Autonomy time: 78hr 09min at +43°C
- Recommended solar array size: > 400 Wp

**Dimensions**

- External: H x W x D: 959 x 1282 x 740 mm
- Shipping weight: 129 kg
- Gross volume: 205 litre
- Storage baskets: 5

**Technical Details**

- Operating voltage: 24 to 45 Vdc
- Minimum starting voltage: 24 Vdc
- Minimum starting power: 50 W
- Minimum solar radiation for continuous running: 125 W/m² (using 400 Wp array)
- Compressor: Danfoss / Secop BD35K
- Refrigerant: R600a

**WHO Pre-qualification**

- Test procedure: E003/RF05.3-VP.3
- Performance specification: E003/RF05.3
- PQS reference: E003/058

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**What is ‘Autonomy’ and ‘Holdover’?**

- **Autonomy** is the amount of time that the refrigerator can maintain the vaccine load within the temperature range of +2°C to +8°C with minimal solar radiation available and at maximum rated ambient temperature. The VC110SDD has 78hr 09min autonomy at 43°C.

- **Holdover** is the amount of time that the refrigerator can maintain the vaccine load within the temperature range of +2°C to +10°C with no solar radiation and at maximum rated ambient temperature.

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**Experts in Solar innovation**

The Dulas Solar International team provide high quality solar solutions where there is an unreliable or nonexistent grid network. Since 1982, Dulas has supplied solar power systems throughout the world for healthcare, water supply, telecommunications, humanitarian development, education, commerce and communities.

Our products and services include solar vaccine refrigerators and freezers (certified to WHO PQS standards), training and technical advice on the use and maintenance of refrigerator systems, solar water pumping and bespoke solar generating systems for remote locations.