

PRODUCT OVERVIEW

VC60SDD

Hot Zone rated solar direct drive combined vaccine refrigerator and water pack freezer.

Designed to operate at +43°C this combined refrigerator/ freezer is the ideal solution for supporting outreach work in remote areas.

Features & Benefits

- 57 litre vaccine storage capacity
- Water pack freezing capacity: 2.4 kg per 24 hrs
- Water pack storage capacity: 23 x 0.6 litres
- +5°C to +43°C extended operating temperature range
- Works at WHO solar reference period 3.5kWh/m²/24h
- 94h 11 min holdover
- 82h 48min autonomy
- Corrosion tested to DIN 8985
- Inbuilt handle with lock
- Inbuilt 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



VACCINE
CAPACITY
**57
LITRE**

ICEPACK
CAPACITY
**23 X 0.6L
ICEPACKS**

INTERNAL
**+2°C TO
+8°C**

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



VC60SDD Technical Specifications

Performance

| | |
|-----------------------------------|------------------|
| Net vaccine storage capacity | 57 litres |
| Climate zone | Hot zone (+43°C) |
| Minimum rated ambient temperature | +5°C |
| Holdover time | 94h 11min |
| Autonomy time | 82h 48min |
| Recommended solar array size | > 600 Wp |

Dimensions

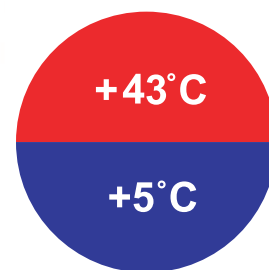
| | |
|-----------------------------|--|
| External: H x W x D (mm) | 959 x 1282 x 740 mm |
| Shipping weight | 170kg |
| Gross volume | 124 litre refrigerator 24 litre freezer |
| Waterpack freezing capacity | 2.4kg at +43°C |
| Waterpack storage capacity | 13.8 at +43°C |

Technical Details

| | |
|--|---|
| Operating voltage | 24 to 45 Vdc |
| Minimum starting voltage | 24 Vdc |
| Minimum starting power | 40 W refrigerator, 40 W freezer |
| Minimum solar radiation for continuous running | 125 W/m ² (using 600 Wp array) |
| Compressor | 2 x Danfoss / Secop BD35K |
| Refrigerant | R600a |

WHO Pre-qualification

| | |
|---------------------------|------------------|
| Test procedure | E003/RF05.3-VP.3 |
| Performance specification | E003/RF05.3 |
| PQS reference | E003/084 |



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 VC60SDD has 77hr 57min 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.

Freeze-Free® is a registered trademark of Dulas Ltd.

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.