# SUN Danzer Description



#### Features:

- 60mm of Polyurethane Insulation
- Scratch resistant galvanized steel exterior
- Easy to clean aluminum interior with drain
- Automatic 12 or 24VDC operation
- Simple design for worldwide service
- Cost optimized for Small Solar Home Systems

### 2-Year Limited Warranty

(PV and SHS not included)

## Low Cost Off-Grid DC Refrigerator for Developing Countries

The DCR100 is SunDanzer's first product specifically designed to meet the cost and performance requirements of rural areas in developing countries. Given the falling prices of PV and Lithium batteries (i.e. cost of power), SunDanzer optimized the DCR100 to be as cost-effective as possible with only a slight increase in power consumption and without sacrificing quality. Designed in the US and manufactured in China, the DCR100 makes refrigeration possible in remote locations where it was previously unavailable or too costly. The DCR100 is well suited for both domestic and productive use applications.

While the DCR100 is designed to work with a wide range of Solar Home Systems, it has been tightly integrated with the Zimpertec Litio. The Litio has been customized with a programmable DC output dedicated to powering the fridge, turning it on and off to conserve and optimize power. For example, the fridge, once cold, can be turned off in the evening and during the night, enabling the battery to be allocated to powering lights and other appliances.

#### **Specifications:**

Volume	100 L [3.5 cu. ft.]
Refrigerator	0-8°C [32 to 46° F]
Ambient range	10-43°C [50 to 110°F]
Voltage range	10 to 31VDC
Energy use in 32°C	0.22 kWh/d (5C int)
Refrigerant	R-600a
Input Power	35-60 Watts
Defrost	Manual
External dimensions	25.75 x 26.75 x 30.5
$(L \times W \times H)$	in.
System size	92 Watt PV
	29 Ah Lithium
	110 Ah Lead Acid