



Steca PF 166

Solar freezer

The Steca PF166 is the most energy saving DC fridge and freezer combination for all DC and solar applications, also for medical clinics and medicine cooling. The device can be used either as a fridge or as a freezer. The user can also fully program the unit and adjust the temperature inside the cooling compartment individually.

Due to the latest A++ cooling technology in combination with optimized electronic regulation and compressor speed control Steca provides optimal use of energy. This leads to cost savings as the size of the necessary PV off-grid system can be reduced in comparison to other DC fridges.

User friendliness, highest quality, reliability and maintenance free long life-time are important characteristics of this innovative product. The device can either run with 12 V or 24 V input voltage.

Features

- A++ cooling technology
- lockable lid
- compressor speed control
- automatic selection of 12 V / 24 V
- temperature fully programmable
- fridge or freezer in one cabinet
- applicable for all DC applications

Display

- user friendly display
- digital temperature display

Protection

- wrong polarity protection
- low voltage disconnection (lvd)
- Power breakdown display
- automatic reconnection after LVD

Special features

- Unit runs on a single 70 W module in most climates
- Fast cooling due to compressor speed control
- Low maintenance and easy to clean

Technical data

Steca PF166		
System voltage	12 V	24 V
Energy efficiency class	A++	
Cooling method	compressor	
Energy optimized speed control	yes	
Full digital and electronic control system	yes	
Configurable	yes	
Usable cooling volume	166 liters (5,9 ft ³)	
Input voltage range	10 V to 17 V	17 V to 31,5 V
Deep discharge protection	10,4 V	22,8 V
Automatic switch-on threshold	11,7 V	24,2 V
Maximum power consumption	40 - 100 W	
Recommended fuses	15 A	7,5 A
Refrigerator or freezer function	adjustable	
Adjustable internal temperature	yes	
Refrigerator temperature range	2 °C 35,6 °F – 12 °C 53,6 °F	
Freezer temperature range	-20 °C -4 °F – -10 °C 14 °F	
Ambient temperature range	10 °C 50 °F – 43 °C 109 °F	
Display	digital temperature display in lid	
Hanging baskets	2	
Freezer trays	3	
Lock	yes	
Cold battery	1	
Celsius/Fahrenheit temperature display	adjustable	
Display brightness	adjustable	
Automatic energy-saving mode	yes	
WHO Certificate	no	
External dimensions H x W x D	91,7 x 87,2 x 70,9 cm 36.1 x 34.33 x 27.91 inch	
Weight	61 kg 134 lbs	

Technical data at 25 °C / 77 °F



Certificates

- Conform to European Standards (CE)
- Proved for solar applications
- Made in EU ISO 9001 and 14001
- CFC-free (R-134a)
- RoHS Compliant



Steca fuel cells

Efoy 600, 1200, 1600

The Efoy fuel cells are direct methanol fuel cells (DMFC) which can run in combination with a battery.

The fuel cells can be fully integrated into a Steca hybrid system as a reserve generator. In case of extra energy demand, the fuel cell is automatically started and the battery is charged. The cell is delivered together with the fuel tank, and can be connected directly to a 12 V battery. It is designed for small systems which require their energy supply to be extremely reliable.

Functions

- Easy to integrate into a Steca hybrid system
- Plug & play solution
- Liquid tank for methanol allows fuel to be managed easily

Display

- LEDs to display system status
- Displays the Ah fault messages and the charging process

Certificates

- CE compliant
- Made in Germany

Technical data

Fuel cell	Efoy 600	Efoy 1200	Efoy 1600
Charge capacity	600 Wh/day 50 Ah/day	1.200 Wh/day 100 Ah/day	1.600 Wh/day 130 Ah/day
Grid voltage ¹⁾	12 V		
Rated output	25 W	50 W	65 W
Rated current	2,1 W	4,2 W	5,4 W
Methanol consumption	1,1 l/kWh; 1,3 l/100 Ah		
Noise level	23 ²⁾ 39 ³⁾ dB [A]		
Weight	7,3 kg	7,5 kg	7,6 kg
Operating temperature	-20 °C (-4 °F) ... +40 °C (104 °F)		
Dimensions l x w	43,5 x 20,0 x 27,6 cm		
Recommended batteries	12 V lead batteries (lead acid or lead gel) with 40 to 200 Ah capacity		

¹⁾ 24 V devices available on request.

²⁾ at a distance of 7 m

³⁾ at a distance of 1 m

Technical data at 25 °C / 77 °F

Tank cartridge	M5	M10
Volume	5 litres	10 litres
Weight	4,3 kg	8,4 kg
Dimensions l x w x h	190 x 145 x 283 mm	230 x 193 x 318 mm
Capacity	4,5 kWh 380 Ah at 12 V 190 Ah at 24 V	9,1 kWh 760 Ah at 12 V 380 Ah at 24 V

Tank cartridges in other dimensions available on request.

