



Solar Fridge Kits

Cold and reliable ¹⁾!



¹⁾ Solar panels 10 years guarantee

free energy

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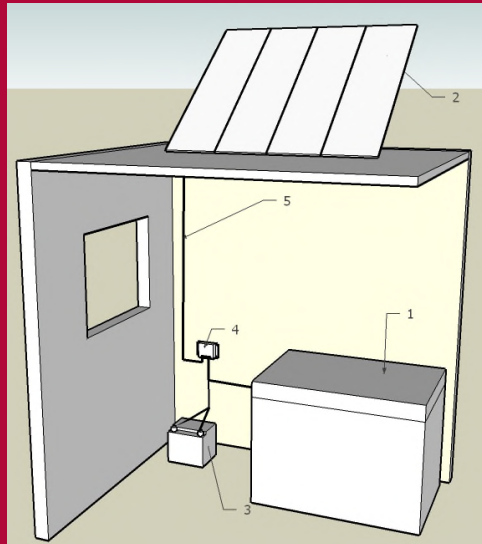
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Solar fridge kits

Components and functions



- 1** The 166 liters **fridge/freezer** allows storage, conservation or freezing of beverages and foods. Designed with a A++ class isolation, this apparatus has been selected for its electrical energy very low consumption characteristics.
- 2** The **solar panels**²⁾ convert light into electricity; the number of panels is determined considering local irradiation conditions and temperature differences between room temperature and temperature inside the fridge.
- 3** Energy generated by solar panels is stored inside the **battery**. This storage ensures continuous service while irradiation is limited (at night, cloudy and rainy periods,...)
- 4** The **charge controller** ensures proper operation of the fridge cooling system. Battery overloading and deep discharge are prevented greatly enhancing lifetime duration of this battery.
- 5** A **set of components** supplied in the kit with previously listed components facilitates mounting and cabling operations at site.

²⁾ IEC61646 certified panels on demand



Solar fridge kit

TABLE DE SELECTION				
	Temperature difference °C ³⁾	Product code	FEE-14-12 ⁴⁾	Battery capacity (Ah - 24V) ⁵⁾
5,5 kWh/m ² /day ⁶⁾	31	NR-FS-56/55	4	55
	40	NR-FS-112/110	8	110
	47	NR-FS-168/165	12	165
	52	NR-FS-224/225	16	225
	58	NR-FS-336/325	24	325
	66	NR-FS-560/560	40	560
3,5 kWh/m ² /day ⁶⁾	25	NR-FS-56/70	4	70
	33	NR-FS-112/140	8	140
	40	NR-FS-168/210	12	210
	44	NR-FS-224/280	16	280
	51	NR-FS-336/410	24	410
	60	NR-FS-560/700	40	700

How to choose?

1

Define temperature difference between maximum room temperature and expected temperature inside the fridge.

Examples

Maximum room temperature:
Fridge temperature:
Resulting temperature difference:

Fridge

40°C
3°C
37°C

Freezer

30°C
-18°C
48°C

2

On the table above, choose the solar irradiation in accordance with your local conditions (if unknown contact us)

Solar irradiation:

5,5 kWh/m²/jour

3,5 kWh/m²/jour

3

Locate the temperature difference just above the value calculated in « 1 »; the line with this temperature contains the characteristics of the kit to be selected.

Temperature difference immediately available:
Recommended product:
Panels reference:
Number of panels:
24V battery capacity:

40°C
NR-FS-112/110
FEE-14-12
8
110Ah

51°C
NR-FS-336/410
FEE-14-12
24
410Ah

Non contractual photos and sketches

³⁾ Maximum temperature difference between room where the fridge is located and temperature inside the fridge.

⁴⁾ Number of FEE-14-12 14Wp 12V panels.

⁵⁾ Monthly average irradiation (5,5 kWh/m²/day = typical value commonly observed in Africa; 3,5 kWh/m²/day = typical value commonly observed in Europe).

⁶⁾ Capacity defined for about 6 day's autonomy.