LABOCON

SOLAR FREEZER

NOTE: The color of the actual product may differ from the color pictured in this catalog due to printing limitation.

SOLAR FREEZER LSF-18-100 SERIES

Labocon Solar Freezers LSF-18-100 Series are energy efficient freezers with fully hermetic Domus compressor and integrated electronic controls. The unit can handle abrasive conditions with quiet and smooth operation.

Features

- Single top door with lock
- Equipped with drawers
- High temperature resistance design
- Automatically turns off when low input voltage
- Digital temperature display
- Refrigerant: CFC free R134a
- Suitable for AC/DC applications through an AC/DC adaptor

Application

It is widely used in life science research, medical, food and beverage industries as a remote storage system. The solar freezer can freeze products and is perfect for ice making.

Specification

Model	LSF-18-101	LSF-18-102	LSF-18-103
Capacity	68 L	100 L	150 L
Temp. Range	-18°C to 30°C		
Overall Dimension (LxWxH)	535x535x770 mm	535x535x845 mm	738x535x845 mm
Weight (Net/Gross)	25/28 kg	30/33 kg	35/38 kg
Power	52 W	65 W	75 W
Power Supply	DC 12V/24V		
Catalog No.	9423101343	9423102343	9423103343

Model	LSF-18-104	LSF-18-105	LSF-18-106
Capacity	200 L	268 L	358 L
Temp. Range	-18°C to 30°C		
Overall Dimension (LxWxH)	870x535x845 mm	1072x535x845 mm	1290x598x850 mm
Weight (Net/Gross)	42/45 kg	48/51 kg	48/51 kg
Power	87 W	100 W	120 W
Power Supply	DC 12V/24V		
Catalog No.	9423104343	9423105343	9423106343

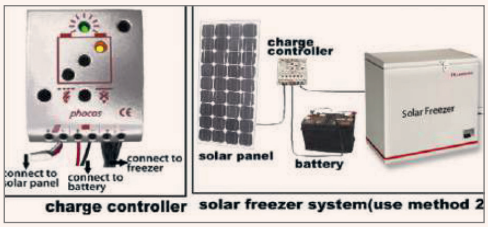
Optional Accessories

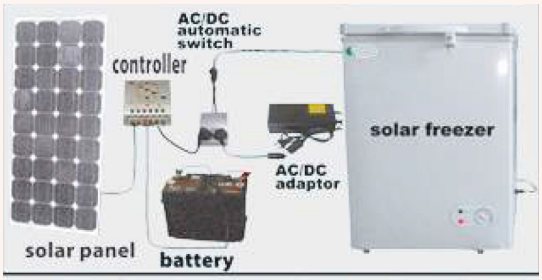
Model	LSF-18-101
LSF-18-100 Series	Charge controller
	AC/DC automatic switch
	Compressor
	Controller of compressor
	Thermostat
	Cable with clips
	Fan
	Control panel for compressor
	Bulb
	Basket
	AC/DC adaptor, 110V-240V to 24V/6A
	AC/DC adaptor, 220V-240V to 12V/12.5A
	AC/DC adaptor, 110V-130V to 12V/12.5A
LSF-18-101 and LSF-18-102	Solar panel of 120 W
	Battery of 100 Ah
LSF-18-103	Solar panel of 160 W
	Battery of 120Ah
LSF-18-104	Solar panel of 180 W
	Battery of 150 Ah
LSF-18-105 and LSF-18-106	Solar panel of 200 W
	Battery of 150 Ah

Principle

The solar panel converts sunlight into DC power or electricity to charge battery. This electricity is controlled via a solar controller which ensures that battery is charged properly and not damaged and that power is not lost / discharged. DC appliances can then be powered directly from the battery.

Operational Methods

Method 1	**Accessory: AC/DC adaptor** This is the simplest method. The DC freezer can be powered by AC. It is used to directly put the AC/DC adaptor in the conventional 220V and then the freezer can work well without solar panels, battery and controller.	 solar freezer system(use method 1)
Method 2	**Accessory: Solar panels, battery, controller** The solar panel converts sunlight into DC power or electricity to charge battery. This electricity is controlled via a solar controller which ensures that battery is charged properly and is not damaged and that power is not lost / discharged. Solar freezer can then be powered directly from the battery.	 charge controller solar freezer system(use method 2
Method 3	**Accessory: Battery** At night or during the rainy season when the weather is cloudy, the solar panel can't absorb the sunlight. The spare battery has enough electricity. This battery can be directly connected the solar freezer to power and then the solar freezer can work well. It is also used for operating car, boat, 4WD, motor house, caravan, truck, marine	

Method 4	**Accessory: Charge controller, solar panel, battery, AC/DC auto transfer switch, AC/DC adaptor** Combine Method#1 and Method#2 Add a AC/DC auto transfer switch, when solar panel can't provide electricity. The auto transfer switch can automatically switch to AC electricity (110v/220v) and when the solar panel can provide electricity, it will go back to DC solar power (12v/24v)	 solar freezer system(use method 4)
AC/DC automatic switch The power supply is preferential on the position 1, it means if customer plugs into position 1 with the cord of solar power source and plug into position 2 with the cord of mains electricity AC 220/110V, the solar power source is the preferential power supply for the DC freezer. On the other hand, mains electricity becomes the preferential power supply.		 charge controller AC/DC automatic switch

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