

Foldable Solar Panel



The Eco-Sources series of portable folding solar panels are now in their 3rd generation design. The panels were originally designed for humanitarian purposes. It's designed to charge a deep cycle battery or battery bank from which you can then power 12V appliances or 180~260V appliances with the use of an inverter. It's widely used in camping, caravans, mobile homes, farms, beaches and deserts. Now we have developed 80W, 100W, 120W, 160W and 200W mono and poly portable folding solar panel.

Features

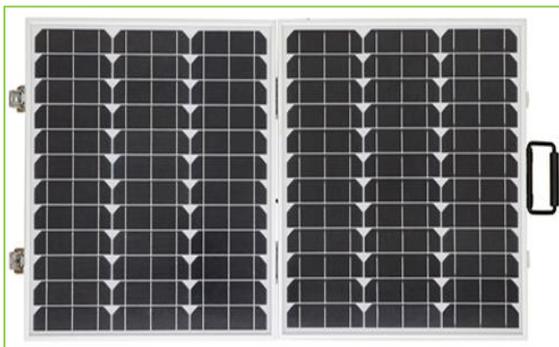
1. High quality hail proof panels, Versatile, rugged design
2. Waterproof regulator
3. Aluminum frame
4. 12/24V DC Regulator & Solar Controller (customized)
5. Pre wired nothing to buy
6. High quality crystalline cells
7. Night light controller
8. Compact size, folding easily for storage and transit

Kit Contents

Iron handle	The iron handle is attached to the frame of solar panel for easy carrying
Steel fastener	Two stainless steel durable safety fasteners are equipped to latch two solar panel during carrying
Solar controller	The water-proof solar controller with LED light indications, 12V/24V automatic detect, protect the battery
3m or 5m cable	A 3m(default) or 5m cable with a positive and a negative alligator clamp for connection to the battery
Support leg	Two support legs are adjustable to make panels the best angle for maximum sunshine
Instruction Manual	An up to date and well-printed instruction manual is provided



Folding View



The front of folding panel



the back of folding panel



Unfolding View



Durable Iron Handle



stainless steel safety fastener



Foldable Support Leg



Water-proof solar controller



Water proof junction box



Junction box



3M cable with alligator Claps to battery

SPECIFICATIONS

Model	ICO-FM-80W	ICO-FM-100W	ICO-FM-120W	ICO-FM-160W	ICO-FM-200W
Electrical Characteristics under STC*					
Maximum power(Wp)	80W	100W	120W	160W	200W
Maximum power per panel(Wp)	40W	50W	60W	80W	100W
Maximum power voltage (Vmp)	18V	18V	18V	17.3V	17.3V
Maximum power Current(Imp)	4.44A	5.54A	6.66A	9.26A	11.56A
Open circuit voltage(Voc)	21.6V	21.6V	21.6V	21.6V	21.6V
Short circuit current(Isc)	4.88A	6.1A	7.32A	11A	12.26A
Operating temperature	-40°C~+85°C				
Maximum system voltage	1000V DC				
Power tolerance	±2%				
Temperature Dependence of Isc, Voc and Wp					
Nominal operating cell temperature (NOCT)	47°C±2°C				
Temperature coefficient of Wp	-0.5±0.05%/°C				
Temperature coefficient of Voc	-0.4±0.05%/°C				
Temperature coefficient of Isc	0.06±0.01%/°C				
Mechanical Characteristics and Dimensions					
Solar Cell	High efficiency cutting monocrystalline solar cell				
Folded dimensions(mm)	551*542*76	629*542*76	824*542*76	1206*542*76	1197*542*76
Unfolded dimensions(mm)	551*1086*36	629*1086*36	824*1086*36	1206*1086*36	1197*1086*36
Net weight(KG)	9.0	10.12	12.33	13.88	15.8
Junction box	Water-proof IP65, TUV certified, ultra reliable bypass diodes fitted				
Front glass	3.2mm high transmission, low iron, tempered glass				
Frame	Anodized aluminum alloy				

Model	ICO-FP-80W	ICO-FP-100W	ICO-FP-120W	ICO-FP-160W	ICO-FP-200W
Electrical Characteristics under STC*					
Maximum power(Wp)	80W	100W	120W	160W	200W
Maximum power per panel(Wp)	40W	50W	60W	80W	100W
Maximum power voltage (Vmp)	18V	17.9V	17.9V	17.9V	17.3V
Maximum power Current(Imp)	4.44A	5.6A	6.7A	8.94A	11.56A
Open circuit voltage(Voc)	21.6V	22.41V	22.41V	22.41V	21.6V
Short circuit current(Isc)	4.88A	6.18A	7.38A	10.2A	12.26A
Operating temperature	-40°C~+85°C				
Maximum system voltage	1000V DC				
Power tolerance	±2%				
Temperature Dependence of Isc, Voc and Wp					
Nominal operating cell temperature (NOCT)	47°C±2°C				
Temperature coefficient of Wp	-0.5±0.05%/°C				
Temperature coefficient of Voc	-0.4±0.05%/°C				
Temperature coefficient of Isc	0.06±0.01%/°C				

Mechanical Characteristics and Dimensions

Solar Cell	High efficiency cutting polycrystalline solar cell				
Folded dimensions(mm)	589*511*76	690*511*76	861*511*76	861*666*76	997*664*76
Unfolded dimensions(mm)	589*1026*36	690*1029*36	861*1029*36	861*1336*36	997*1334*36
Net weight(KG)	9.26	10.38	12.33	15.16	17.82
Junction box	Water-proof IP65, TUV certified, ultra reliable bypass diodes fitted				
Front glass	3.2mm high transmission, low iron, tempered glass				
Frame	Anodized aluminum alloy				

Maintenance:

Cleaning Panels

Use warm water and a soft sponge or cloth to clean your panel and keep the controller dry.

Will hail hurt my solar panel?

All glass used in solar panels is toughened & factory tested to International standards. The small hail is no problem.

Do the solar panel systems make any noise?

No, they are not noise and you can use them in all national parks.

Can I attach a mount to the frame of the solar panel?

The solar panels come with a very sturdy aluminum frame. You can screw or pop rivet into this frame. But please ensure when drilling the mounting holes, do not hit the solar cells or backing.

Will dirty glass on my solar panel reduce the power it creates?

Yes, please keep the glass area of your solar panel as clean as possible. All dirty marks or films on the glass surface will reduce the efficiency. Keep it free from bird and bat dropping's as they may permanently mark the glass surface. Clean with a moist soft cloth.

What can I run with a solar panel?

The folding solar panels will charge a battery while it's in the sun and stop when the battery is fully. If your appliances draw more power than the solar panel can make, it will not be able to completely charge your battery. This type of unit is commonly used to run 12 fridges, lights, TV'S, DVD players, mp3 players and inverters to run 240V appliances.

Warranty & Repairs

Customer Service Policy

Eco-sources solar panel is committed to providing exceptional customer service and quality products. The products meet all government and international regulations.

Warranty

Our solar products come with a 25 year warranty on all solar panels (10 years at 90% efficiency and 25 years at 80% efficiency)

Repairs

For repairs please contact to us email or telephone.

Exchange Service

You can choose between a refund, exchange or credit where goods are faulty or doesn't do what it's supposed to do.