



# TECHNICAL SPECIFICATIONS



## SOLAR PANELS

### EFFICIENT AND RELIABLE

- Up to 20% higher efficiency than our competitors' panels of the same size
- Equipped with diodes to reduce losses due to shade
- Robust and built to resist the Canadian climate and roads
- Certified, tested and meet the highest quality standards



All images contained in this document are for illustration purposes only. Actual products may differ slightly from those shown.  
\*Certain conditions apply to the guarantees contained in this document. Visit our website for details.

# RIGID SOLAR PANELS

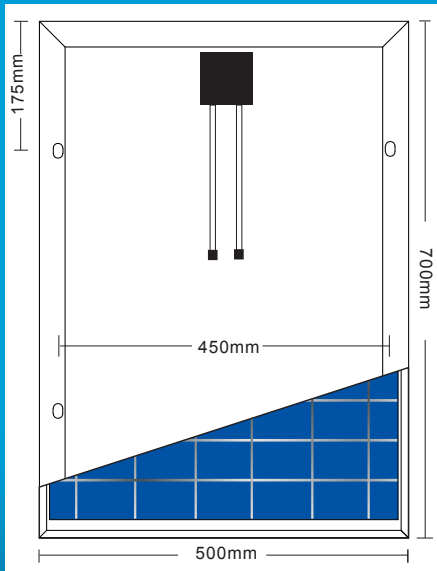
- High efficiency cells
- Corrosion resistant
- Built to resist impacts and vibrations



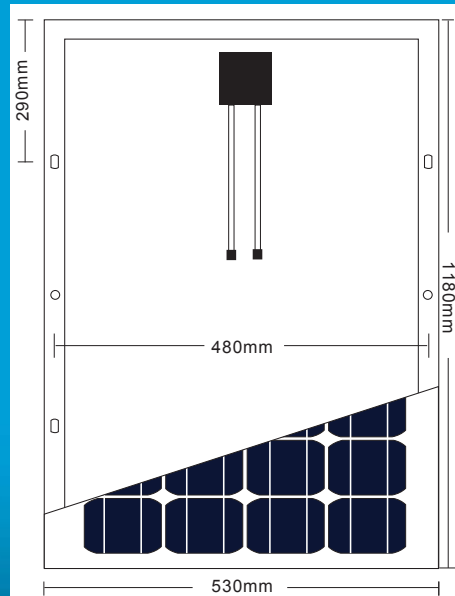
Model	ESP50	ESP100	ESP170
Nominal Maximum Power (Pmax)	50 watts	100 watts	170 watts
Cell type	Poly	Mono	Mono
Length	27 5/8" 700 mm	46 1/2" 1180 mm	58 3/8" 1481 mm
Width	19 3/4" 500 mm	20 7/8" 530 mm	26 1/2" 671 mm
Thickness	1 3/8" 35 mm	1 3/8" 35 mm	1 5/8" 40 mm
Weight	11.0 lbs 5.0 kg	18.0 lbs 8.2 kg	24.2 lbs 11.3 kg
<b>Electrical Characteristics</b>			
Optimum Operating Voltage (Vmp)	17.60 V	18.80 V	19.50 V
Optimum Operating Current (Imp)	2.84 A	5.31 A	8.76 A
Open-Circuit Voltage (Voc)	21.12 V	22.20 V	22.85 V
Short-Circuit Current (Isc)	3.13 A	5.85 A	9.37 A
Power Tolerance		±3%	
Under Standard Test Conditions (STC) : 1000W/m <sup>2</sup> , 25°C, AM1.5G			

## TECHNICAL DRAWINGS

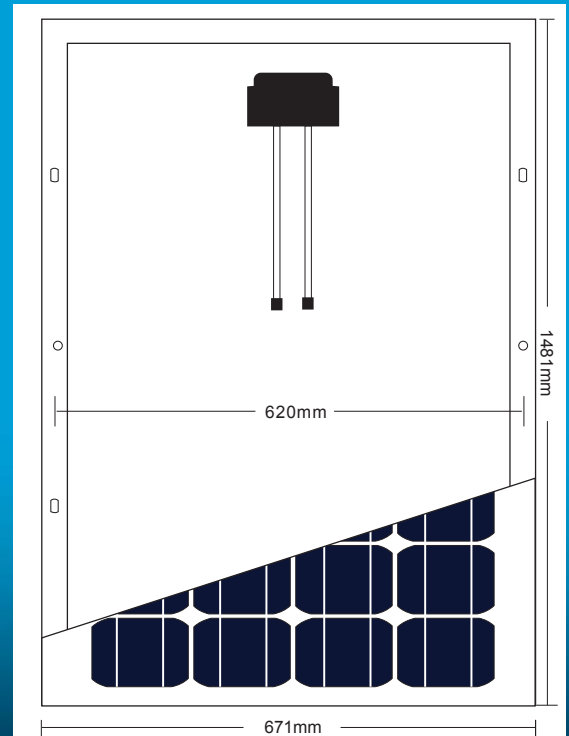
ESP50 - 50 Watts



ESP100 - 100 Watts



ESP170 - 170 watts



# FLEXIBLE SOLAR PANELS

- High efficiency cells
- Highly resistant polymer:  
You can walk on it
- Built to resist impacts  
and vibrations



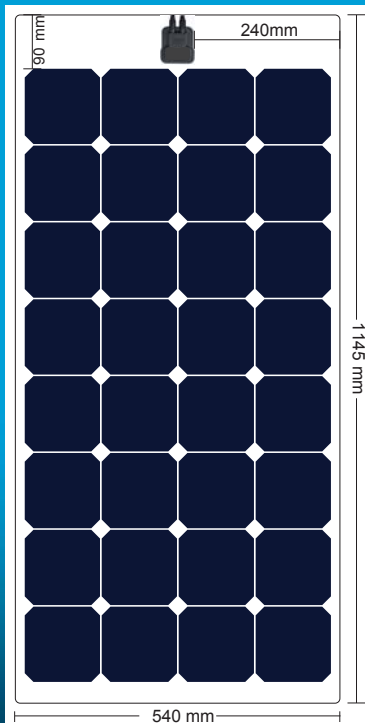
Model	ESPflex35	ESPflex50	ESPflex100	ESPflex130*
Nominal Maximum Power (Pmax)	35 watts	50 watts	100 watts	2 x 65 watts
Cell type	Mono	Mono	Mono	Mono
Length	32 1/2" 825 mm	25 3/8" 645 mm	45" 1145 mm	27" 685 mm
Width	11" 280 mm	21 1/4" 540 mm	21 1/4" 540 mm	21 1/4" 540 mm
Thickness	1/8" 3 mm	1/8" 3 mm	1/8" 3 mm	1/8" 3 mm
Weight	1.6 lbs 0.7 kg	1.6 lbs 0.7 kg	3.0 lbs 1.4 kg	2.2 lbs 1.0 kg
<b>Electrical Characteristics</b>				<b>Plugged in series</b>
Optimum Operating Voltage (Vmp)	19.80 V	17.60 V	17.60 V	22.40 V
Optimum Operating Current (Imp)	1.77 A	2.85 A	5.68 A	5.81 A
Open-Circuit Voltage (Voc)	23.40 V	21.10 V	21.20 V	26.90 V
Short-Circuit Current (Isc)	1.90 A	2.98 A	6.20 A	6.10 A
Power Tolerance	±3%			

Under Standard Test Conditions (STC) : 1000W/m<sup>2</sup>, 25°C, AM1.5G

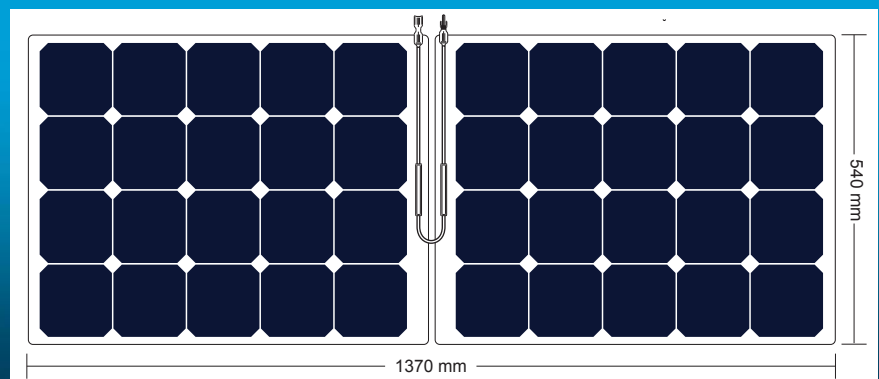
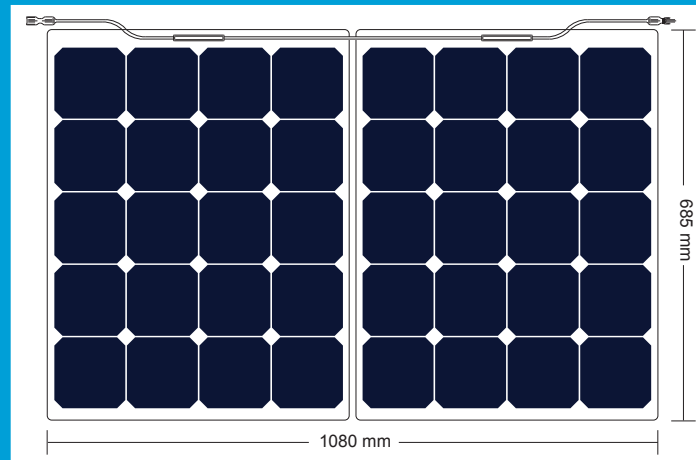
\*Made of two 65 watts panels.

## TECHNICAL DRAWINGS

ESPflex100



ESPflex130 (2 x 65 watts)



# PORTABLE SOLAR CHARGERS

- High efficiency monocrystalline cells
- Robust: Built to resist impacts
- Foldable and easy to store



MPPT with Display



PWM

Model	ESPexp50	ESPexp100P	ESPexp100M
Nominal Maximum Power (Pmax)	50 watts	100 watts	100 watts / equivalent to 130 watts
Charge controller	PWM	PWM	MPPT with Display
Cell type	Mono	Mono	Mono
Folded	21 1/4 x 11 x 2 3/8" 540 x 280 x 60 mm	24 7/8 x 22 1/2 x 3" 630 x 570 x 77 mm	24 7/8 x 22 1/2 x 3" 630 x 570 x 77 mm
Dimensions	21 1/4 x 22" 540 x 560 mm	24 7/8 x 45" 630 x 1140 mm	24 7/8 x 45" 630 x 1140 mm
Weight	12.1 lbs 5.5 kg	23.5 lbs 10.7 kg	23.5 lbs 10.7 kg
<b>Electrical Characteristics</b>			
Optimum Operating Voltage (Vmp)	18.00 V	18.60 V	18.60 V
Optimum Operating Current (Imp)	2.78 A	5.38 A	5.38 A
Open-Circuit Voltage (Voc)	21.60 V	22.30 V	22.30 V
Short-Circuit Current (Isc)	3.00 A	5.81 A	5.81 A
Power Tolerance		±3%	
Under Standard Test Conditions (STC) : 1000W/m <sup>2</sup> , 25°C, AM1.5G			

# USB SOLAR CHARGER

- High performance and efficient solar cells
- Light, foldable and easy to store



USB ADAPTER INCLUDED

Model	ESPxp7	ESPxp14
Cell type	mono	mono
Dimensions	6 1/2 x 9 1/2" 163 x 238 mm	7 1/2 x 13" 188 x 325 mm
Folded	13 x 9 1/2" 325 x 238 mm	15 x 13" 375 x 325 mm
Weight	0.85 lbs - 0.4 kg	1.7 lbs - 0.765 kg
<b>Electrical Characteristics</b>		
Solar - Power	7 watts	14 watts
Solar - Voltage	6V	6V
Solar - Current	1.17A	2.33A
USB - Output	1 port	2 ports
USB - Voltage	5V	5V
USB - Current	1A max	2A max