

Category: Power Generation

Solar Expedition 570W

Item # 11-1000045

A Case for Solar

No assembly is required for the Solar Expedition 570W. The transport case for the 570-watt photovoltaic (PV) array uses a case-integrated racking system, allowing panels to be deployed by one person in seconds. The portable PV array can be scaled quickly by connecting multiple arrays to meet power generation requirements. Its molded, compact case is designed for stacking multiple cases for transport.

How the Solar Expedition 570W Works

Sunlight is collected by the portable array's high-efficiency PV panels. Solar energy is funneled through a power manager for storage in batteries and/or to power the load.







Features

- ~2.85 kWh daily power generation*
- Simplified design for easy deployment and stowage
- Four 140W lightweight military grade non-glass solar panels built with leading edge technology
- Rugged, waterproof case with integrated solar racking
- Maximum power with minimum deployed footprint (<23 ft2)
- Efficient transport with up to 8 arrays stacked on a standard pallet
- Designed to MIL-STD-810H
- Wind threshold of up to 70 MPH in any direction
- Minimum glare and built with corrosion resistant materials *Based on five hours of solar irradiance



Solar Expedition 570W with sandbags





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General	
Construction	Rugged transport case with integrated solar panels and racking
Deployment Angle	35 ° nominal
Ground Securing	Sandbags
Setup/Stowage Time	< 4 minutes
Certifications	IP67 Designed to MIL-STD-810H
Warranty	1-year for materials and workmanship

QTY 4 Solar Panels @ 77 °F (25 °C)		
Rated Power	570 W	
Rated Voltage (V _{MP})*	65.5 VDC	
Open Circuit Voltage ($V_{\rm oc}$)	79.6 VDC	
Rated Current (I _{MP})*	8.7 A	
Short Circuit Current (I_{SC})	9.0 A	
Maximum System Voltage	600 VDC	
Cell Type	Mono-crystalline Silicon PERC solar cells with Merlin™ Interconnect	
Cell Efficiency	> 21%	
Connectors	One male and one female industry standard MC4 per panel	

^{*} Option: Parallel/series wiring for 32.7 V_{MP} & 17.4 A_{MP}

Connections	
Solar Panel Connectors	(4) MC4

Environmental	
Operating Temperature	-4 to 140 °F (-20 to 60 °C)
Storage Temperature	-25 to 160 °F (-31.7 to 71 °C)
Water and Dust Resistance	IP67
Wind Threshold	170 MPH in any direction



Solar Expedition 570W deployed in the field

Weights and	Dimensions	$(L \times W \times H)$

Transport Weight	88.0 lb (39.9 kg) 96.0 lb (43.5 kg) with 30 ft solar cable (sold separately and can be stored inside case)
Transport Dimensions	43.0 x 38.37 x 6.75 in (109.22 x 97.46 x 17.15 cm)
Deployed Dimensions*	~76.7 x 43.0 x 37.0 in (194.82 x 109.22 x 93.98 cm)

^{*}Deployed dimensions can vary based on distance between panels and deployment angle

Includes

- (4) 140W solar panels
- (1) Rugged transport case
- (12) Sandbags

Recommended Components and Accessories



24VDC Li Power Pak 2400 Item # 21-0202306



24VDC Power Hub 3500 Item # 20-0302206



Cable, Solar Y, MC4/Bayonet, 24VDC, 30', 6AWG 30 ft - Item # 13-1000302

One will be required



Cable, Solar, MC4/Bayonet, 24VDC, 30', 6AWG 30 ft - Item # 16-0800102 Two will be required

