

# **190W Crystalline Foldable Solar Panel**

The 190W Crystalline Foldable Solar Panel uses high-efficiency Maxeon monocrystalline cells instead of PowerFilm's traditional amorphous silicon, increasing power and reducing the deployed footprint.

The 190W panel provides a unique blend of power and portability. This compact panel fits easily into most backpacks and is the perfect accessory to power various electronics.

The solar panels are mounted to fiberglass plates for durability and incorporated into a weather-resistant fabric that quickly folds for storage and unfolds for use.

### **Tips For Best Use**

- Angle the solar panel toward the sun for the best results
- Always store the solar panel in a cool, dry environment
- Allow time to air dry before packing if the solar panel is wet
- Routinely clean the solar panel to ensure the best performance

## **Charging Capabilities**

**Power Stations -** Ensure your battery includes an integrated charge controller and can accept the 33V provided by the panel.

**Ebikes** - When paired with the proper boost charge controller, the 190W panel is ideal for charging your bike anywhere.

**Ham Radios** - When used with a charge controller that matches your battery chemistry, the 190W panel keeps you powered up and making connections.

### Certifications

- CE
- RoHS
- Berry Amendment Compliance



#### **Benefits**

- Compact, lightweight, durable
- Highest-efficiency crystalline cells
- Easy to deploy and store
- Multiple charging adapters to charge a wide range of devices
- Designed, engineered and assembled in the United States
- Designed to meet applicable MIL-STD-810G specs
- Tested to ensure the panel meets or exceeds required performance
- The blackout design conceals the electrical connections on the panel, creating a sleek appearance



### **Electrical Characteristics**

Rated Voltage at Pmax	33.0V
Rated Current at Pmax	5.7A
Open Circuit Voltage	39.7V
Short Circuit Current	6.3A

\*Typical specs measured at STC. Contact PowerFilm for maximum specs and tolerances to use in custom designs or complex applications.

### **Physical Characteristics**

Part Number	FM3-56F33VKHAS
Folded Dimensions	12.5 x 11.0 x 1.7 inches 317.5 x 279.4 x 43.2 mm
Unfolded Dimensions	79.0 x 24.7 inches 2,006.6 x 627.4 mm
Weight	7.5 lbs / 3.4 kg

#### **Thermal Characteristics**

Temperature Coefficient for Power	-0.27%/°C
Temperature Coefficient for Voltage	-0.236%/°C
Temperature Coefficient for Current	0.058%/°C

#### Connectors

Standard Connector: SAE

**Custom Connectors:** Delphi Weather Pack 4.5mm Barrel Anderson Powerpole



### **Standard Colors**

Khaki
\*Custom Colors Available

### IV Curve

