

## 45 Watt Solar Panel with Integrated Charge Controller

Soltronix brings together high-efficiency SunPower monocrystalline solar cells and PowerFilm® Solar's 30 years delivering custom solar solutions. The 45 Watt Solar Panel includes semi-flexible fiberglass backing, whole-cell design for maximum power and reliability, and an integrated PowerBoost charge controller to provide the greatest total efficiency available on the market.

The Soltronix PowerBoost series of charge controllers incorporate high efficiency DC-DC converters and a proprietary power point tracking system to optimize power collected from the solar panel and delivered to a traditional 12V battery. Designed specifically for use with solar, PowerBoost charge controllers will not overcharge and reduce the lifetime of connected batteries as do common three-stage chargers connected to solar panels

Soltronix also provides a proprietary encapsulation stack. The stack includes ETFE for maximum UV protection, and a custom layer of four other materials to provide impact resistance and durability far above industry norms. Due to this unique stack Soltronix panels can withstand significant hail before breaking.

Leveraging decades of expertise in custom encapsulations and solar electronics, the 45 Watt Solar Panel provides unsurpassed efficiency and reliability for your applications.

### Tips For Best Use:

- Angle the solar panel toward the sun for best results.
- Place in a location without shadows or shading.
- Routinely clean the solar panels to ensure best performance.



### Benefits Include:

- High Efficiency Sun Power Cells
- Integrated PowerBoost Smart Charge Controller
- Over-Charge Protection
- Semi Flexible Design
- Rugged Encapsulation

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### Electrical Characteristics

Battery Charge Type	12V Battery (Flooded and AGM)
Charging Voltage	13.8V (float) 14 (Voc)
Charging Efficiency	88-91%
Maximum Voltage Rating	16V
Output To PowerBoost Charge Controller	Nominally 45W
Effective Power To Battery	40W

### Physical Characteristics

Part Number	RP-15F13.7V
Dimensions	29.6 x 17 x 0.08 inches 751.8 x 431.8 x 2.0 mm
Weight	3.0 lbs 1.4 kg

### Thermal Characteristics

Temperature Coefficient for Power	- 0.32(%/C)
Temperature Coefficient for Voltage	-1.8 (mV/C)

### Connectors

**Standard Connector:**  
Delphi Weatherpack



**Custom Connectors:**  
SAE  
Anderson Powerpole  
4.5 MM



### IV Curve

