

# **SPV100-36M**

# 100W Monocrystalline Solar Panel

#### **Key Features**

Sleek design and a durable frame, the 100 Watt 12 Volt Monocrystalline Panel provides you with the highest efficiency per area and is the perfect item for off-grid applications.

- High module conversion efficiency
- Top ranked PTC rating
- Quick and inexpensive mounting
- 100% Testing on all modules

#### **Potential Uses**

The 100 Watt Monocrystalline Panel can be used in various off-grid applications that include 12 and 24 volts arrays, water pumping systems, signaling systems and other off-grid applications.



**Power Output Warranty** 



Material and Workmanship Warranty

# **SPV100-36M**

## 100W Monocrystalline Solar Panel

#### **Electrical Data**

| Maximum Power at STC*                        | 100 W  |
|--|--------|
| Optimum Operating Voltage (V <sub>mp</sub> ) | 18.5 V |
| Optimum Operating Current (I <sub>mp</sub> ) | 5.41 A |
| Open Circuit Voltage (V <sub>oc</sub> )      | 22.5 V |
| Short Circuit Voltage (I <sub>sc</sub> )     | 5.92 A |
| Module Efficiency                            | 15.47% |
| Maximum System Voltage                       | 1000V  |
| Series Fuse                                  | 15 A   |

### **Thermal Characteristics**

| Operating Module Temperature           | -40°C to +80°C |
|--|----------------|
| Nominal Operating Cell Temerature (NOC | Γ) 45±2°C      |
| Temperature Coefficient of Pmax        | -0.44%/°C      |
| Temperature Coefficient of Voc         | -0.30%/°C      |
| Temperature Coefficient of Isc         | 0.04%/°C       |

### **Junction Box**

| IP Rating        | IP 65                 |
|------------------|-----------------------|
| Diode Type       | HY 10SQ050            |
| Number of Diodes | 2 Diode(s)            |
| Output Cables    | 12 AWG (2.10 ft long) |

## **Mechanical Data**

| Solar Cell Type | Monocrystalline                 |
|-----------------|---------------------------------|
| Number of Cells | 36 (4 x 9)                      |
| Dimensions      | (1020 x 670 x 35mm)             |
| Weight          | (8.1 kg)                        |
| Front Glass     | Tempered Glass 0.13 in (3.2 mm) |
| Frame           | Anodized Aluminium Alloy        |
| Connectors      | MC4 Connectors                  |
| Fire Rating     | Class C                         |

#### **MC4 Connectors**

| Rated Current          | 30A            |
|------------------------|----------------|
| Maximum Voltage        | 1000VDC        |
| Maximum AWG Size Range | 10 AWG         |
| Temperature Range      | -40°F to 194°F |
| IP Rating              | IP 67          |

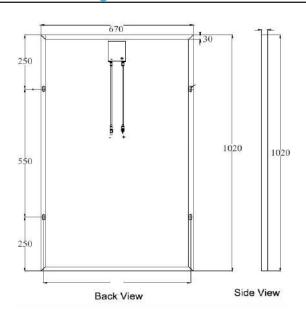
#### Certifications



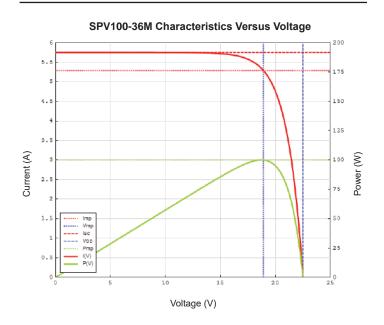




#### **Module Diagram**



### IV-Curve



<sup>\*</sup>All specifications and data described in this data sheet are tested under Standard Test Conditions (STC - Irradiance: 1000W/m², Temperature: 25 °C, Air Mass: 1.5) and may deviate marginally from actual values.