



# LAC SOLAR

# 100W Monocrystalline Solar Panel

#### **Key Features**

LAC SOLAR 100-Watt 12 Volt Monocrystalline Solar Panel features a sleek and durable frame design. This solar panel uses high-efficiency (PERC) monocrystalline silicon solar cells and frame corner supports for outdoor protection.

- High module conversion efficiency
- Top ranked PTC rating
- Quick and inexpensive mounting
- 100% EL testing on all LAC SOLAR modules
- No hot spots guaranteed

#### Potential uses

LAC SOLAR panels have applications in residential solar power arrays, water pumping systems, signaling systems, and plenty of other applications. The LAC 100-Watt solar panel offers a feasible off-grid renewable energy solution for rooftop, RV, boat, and outdoor power systems.



**Power Output Warranty** 



Material and Workmanship Warranty





# 100W Monocrystalline Solar Panel **Electrical Date**

Maximum Power at STC*	100 W
Open Circuit Voltage (Voc)	24.3 V
Short Circuit Current (I <sub>sc</sub> )	5.21 A
Optimum Operating Voltage (V <sub>mp</sub> )	20.4 V
Optimum Operating Current (I <sub>mp</sub> )	4.91 A
Module Efficiency	17.8%
Maximum System Voltage	600 V DC
Maximum Series Fuse Rating	15 A

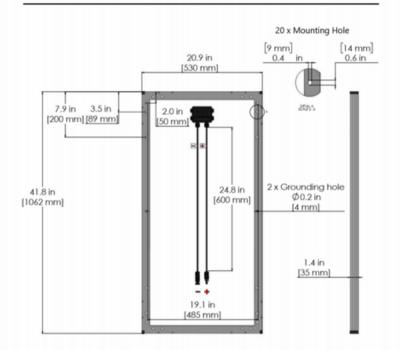
#### Thermal Characteristics

Operating Module Temperature	-40°F to 176°F
Nominal Operating Cell Temerature (NOCT	) 47±2°C
Temperature Coefficient of Pmax	-0.37%/°C
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of Isc	0.05%/°C

#### **Junction Box**

IP Rating	IP 65
Diode Type	HY 10SQ050
Number of Diodes	2 Diode(s)
Output Cables	14 AWG (1.96 ft)

## **Module Diagram**



### **Mechanical Date**

Solar Cell Type	Monocrystalline (6.5 x 3.3 in)
Number of Cells	36 (3 x 12)
Dimensions	41.8 x 20.9 x 1.4 in (1062 x 530 x 35 mm)
Weight	14.1 lb (6.4 kg)
Front Glass	Tempered Glass 0.13 in (3.2 mm)
Frame	Anodized Aluminium Alloy
Connectors	Solar Connectors
Fire Rating	Class C

### **Solar Connectors**

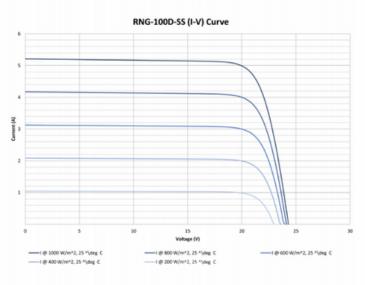
Rated Current	30A
Maximum Voltage	1000 VDC
Maximum AWG Size Range	10 AWG
Temperature Range	-40°F to 194°F
IP Rating	IP 67

### Certifications





## **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.LAC Solar and any of its affiliates has reserved the right to make any modifications to the information on this data sheet without notice. It is our goal to supply our customers with the most recent information regarding our products. These data sheets can be found in the downloads section of our website, www.lacsolar.com





