



RNG-100D-SS

100W Monocrystalline Solar Panel

Key Features

The Renogy 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 Renogy modules
- No hot spots guaranteed

Potential Uses

Renogy solar panels have applications in residential solar power arrays, water pumping systems, signaling systems, and plenty of other applications. The Renogy 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

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Electrical Data

| | |
|--|----------|
| Maximum Power at STC* | 100 W |
| Open Circuit Voltage (V_{oc}) | 24.3 V |
| Short Circuit Current (I_{sc}) | 5.21 A |
| Optimum Operating Voltage (V_{mp}) | 20.4 V |
| Optimum Operating Current (I_{mp}) | 4.91 A |
| Module Efficiency | 17.8% |
| Maximum System Voltage | 600 V DC |
| Maximum Series Fuse Rating | 15 A |

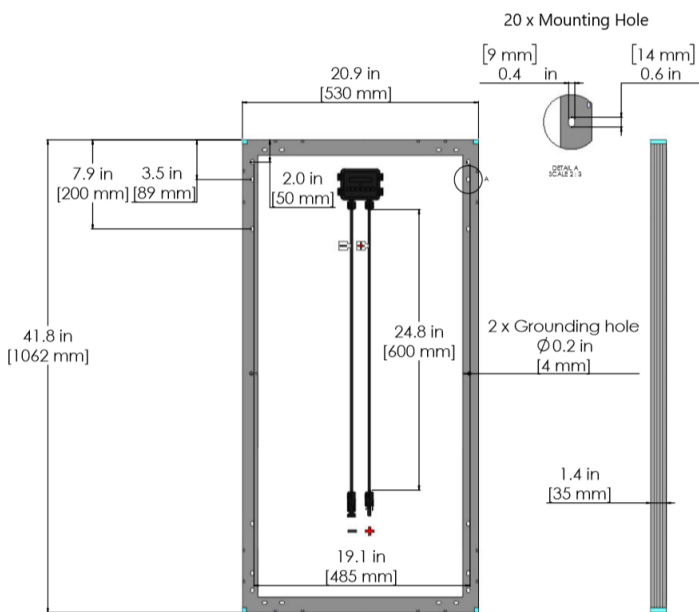
Thermal Characteristics

| | |
|---|----------------|
| Operating Module Temperature | -40°F to 176°F |
| Nominal Operating Cell Temperature (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 Data

| | |
|-----------------|---|
| 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 |

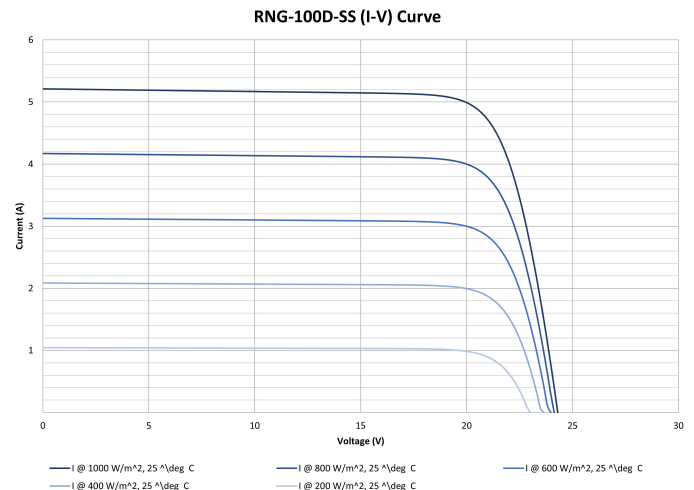
Solar Connectors

| | |
|------------------------|----------------|
| 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



*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. Renogy 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.renogy.com