

RSP550DT-144

Bifacial 550W Monocrystalline Solar Panel

Key Features

Renogy's Bifacial 550-Watt Monocrystalline Solar Panel features substantial conversion efficiency and immense power output. This solar panel is equipped with exceptionally efficient (PERC) monocrystalline silicon solar cells, providing both cost savings and better power output performance. This product promotes renewable energy deployment.

- 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 power solar power arrays, water pumping systems, signal systems, and plenty of other applications. The Renogy Bifacial 450 W Mono-crystalline Solar Panel is ideal for large-sized solar PV arrays and heavy power consumption loads.



Power Output Warranty



Material and Workmanship Warranty

RSP550DT-144

Bifacial550W Monocrystalline Solar Panel

Electrical Data

| | |
|--|----------|
| Maximum Power at STC* | 550 W |
| Optimum Operating Voltage (V_{mp}) | 41.97 V |
| Optimum Operating Current (I_{mp}) | 13.11 A |
| Open Circuit Voltage (V_{oc}) | 49.95 V |
| Short Circuit Current (I_{sc}) | 14.05 A |
| Module Efficiency | 21.3 % |
| Maximum System Voltage | 1500 VDC |
| Maximum Series Fuse Rating | 30 A |

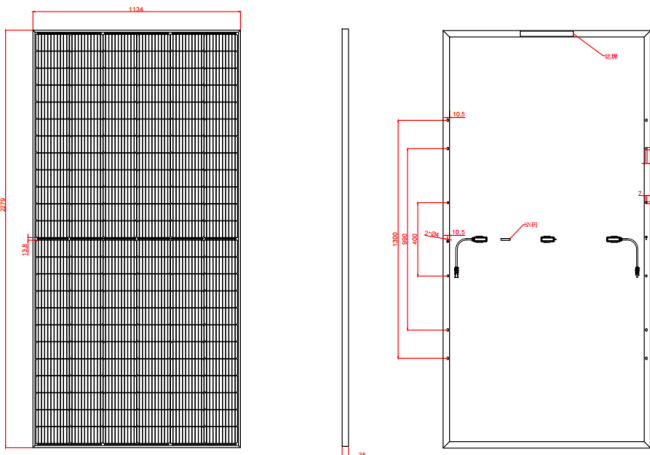
Thermal Characteristics

| | |
|---|-----------------------------|
| OperatingTemp. Range | -40°C - 85°C(-40°F - 185°F) |
| Nominal Operating Cell Temperature (NOCT) | 45±2 °C |
| Temperature Coefficient of Pmax | -0.35 %/°C |
| Temperature Coefficient of V_{oc} | -0.26 %/°C |
| Temperature Coefficient of I_{sc} | 0.05 %/°C |

Junction Box

| | |
|-------------------|------------------------|
| Protection Degree | IP68 |
| Diode | 40SQ045 |
| Number of Diodes | 3 Diode(s) |
| Output Cables | 12 AWG 300mm (11.8 in) |

Module Diagram



Mechanical Data

| | |
|------------------|---|
| Solar Cell Type | PERC Monocrystalline (7.2 x 3.6 in) |
| Number of Cells | 144 (6 x 24), 72 cells in series |
| Dimensions | 2279 x 1134 x 35mm (89.7 x 44.6 x 1.4 in) |
| Weight | 26.5 kg (58.4 lbs) |
| Front Glass | Tempered Glass 0.13 in (3.2 mm) |
| Frame | Anodized Aluminium Alloy |
| Connectors | Solar Connectors |
| Fire Performance | Type 1 |

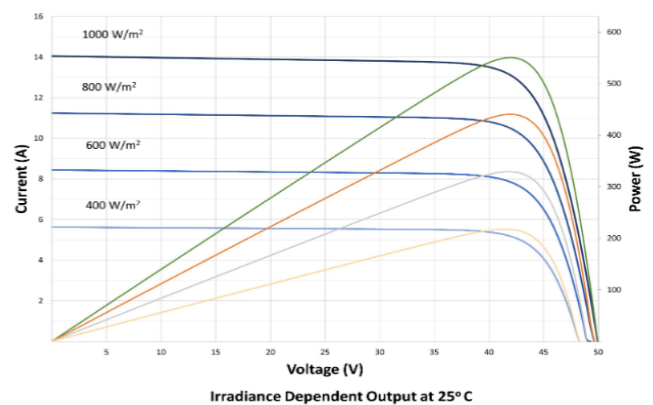
MC4001 - Solar Connectors

| | |
|-----------------------|-----------------------------|
| Rated Current | 40 A |
| Maximum Voltage | 1500 VDC |
| Maximum AWG Size | 10 AWG |
| Operating Temperature | -40°C - 85°C(-40°F - 185°F) |
| IP Rating | IP68 |

Certifications



Electrical Performance



*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