RSP550D-144

550W Monocrystalline Solar Panel

Key Features

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

- Half-cut cell configuration with PERC technology
- High module conversion efficiency
- Quick and inexpensive mounting
- 100% EL testing on all Renogy modules
- No hot spots guaranteed

Potential Uses

Renogy solar panels are used in solar power arrays, water pumping systems, signaling systems and in plenty other applications. The Renogy 550 W Mono-crystalline Solar Panel is ideal for larger sized off-grid solar array power systems, and heavy power consumption applications.

25 years Power Output Warranty

%/$ mYUfg Material and Workmanship Warranty

RSP550D-144

550W Monocrystalline Solar Panel

Electrical Data

Maximum Power at STC*	550 W
Open Circuit Voltage (V_{oc})	49.95 V
Short Circuit Current (I_{sc})	14.05 A
Optimum Operating Voltage (V_{mp})	41.97 V
Optimum Operating Current (I_{mp})	13.11 A
Module Efficiency	21.3 %
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25 A

Thermal Characteristics

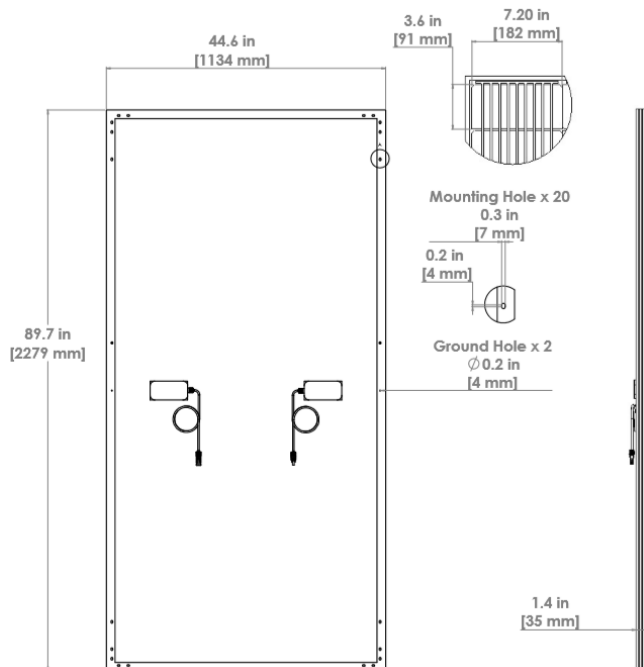|	
Operating Module Temperature	-40°F to 185 °F
Nominal Operating Cell Temerature (NOCT)	45±2 °C
Temperature Coefficient of Pmax	-0.39 %/°C
Temperature Coefficient of Voc	-0.3 %/°C
Temperature Coefficient of Isc	0.06 %/°C

Junction Box

IP Rating	IP65 / IP68 (1m,1h)
Diode Type	FMK4530T
Number of Diodes	3 Diode(s)
Output Cables	12 AWG (1 ft long)

Mechanical Data

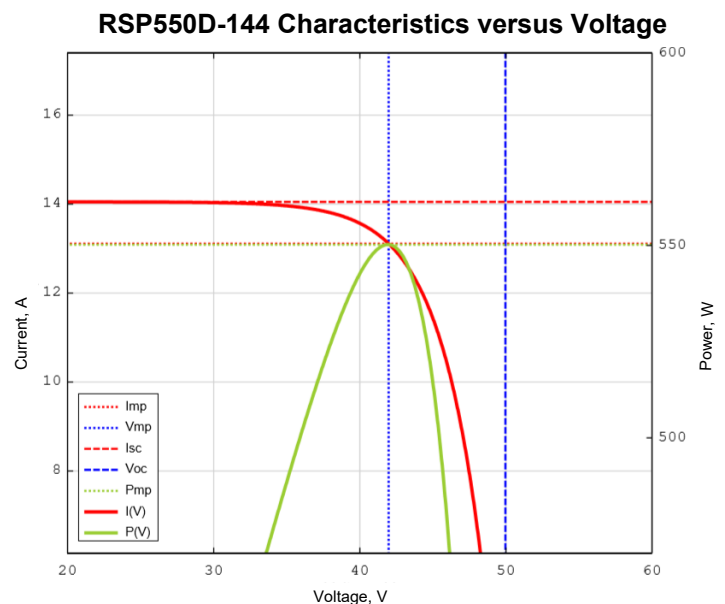|	
Solar Cell Type	PERC Monocrystalline (7.2 x 3.6 in)
Number of Cells	144 (6 x 24), 72 cells in series
Dimensions	89.7 x 44.6 x 1.4 in (2279 x 1134 x 35 mm)
Weight	62.8 lb (28.5 kg)
Front Glass	Tempered Glass 0.13 in (3.2 mm)
Frame	Anodized Aluminium Alloy
Connectors	Solar Connectors
Fire Rating	Class C

MC4001 - Solar Connectors

Rated Current	35 A
Maximum Voltage	1500 VDC
Maximum AWG Size Range	10 AWG
Temperature Range	-40°F to 185°F
IP Rating	IP65 / IP68 (1m,1h)

Certifications

Module Diagram

IV-Curve

RSP550D-144 Characteristics versus Voltage