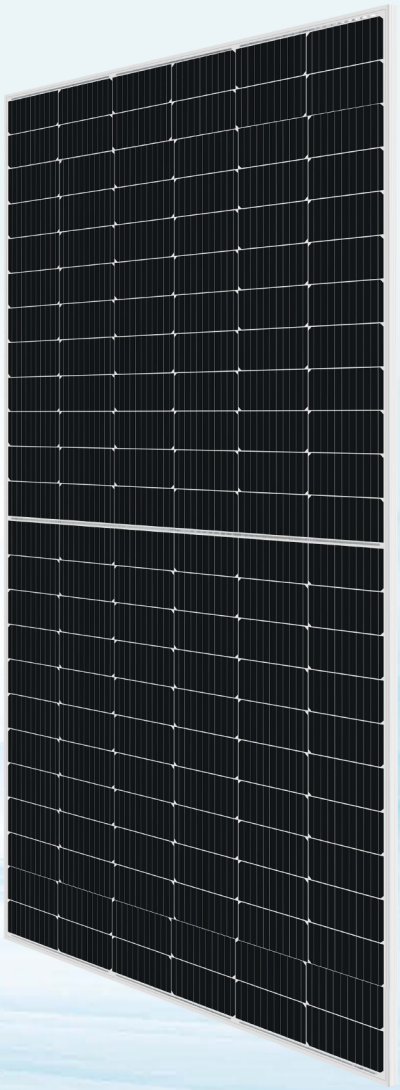
RENOGY



RSP550D-144

550W Monocrystalline Solar Panel

Key Features

Renogy's 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.

- 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 Monocrystalline Solar Panel is ideal for larger sized off-grid solar array power systems, and heavy power consumption applications. Applications include residential, utility, and commercial power systems.

25 years Power Output Warranty

10 years Material and Workmanship Warranty

Renogy | www.renogy.com | support@renogy.com | 909-287-7111
5050 S. Archibald Ave, Ontario, CA 91762

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	1500 VDC
Maximum Series Fuse Rating	25 A

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

Thermal Characteristics

Module Operating Temperature	-40°F to 185 °F
Nominal Operating Cell Temerature (NOCT)	45±2 ºC
Temperature Coefficient of Pmax	-0.35 %/ºC
Temperature Coefficient of Voc	-0.28 %/ºC
Temperature Coefficient of Isc	0.05 %/ºC

MC4001 - Solar Connectors

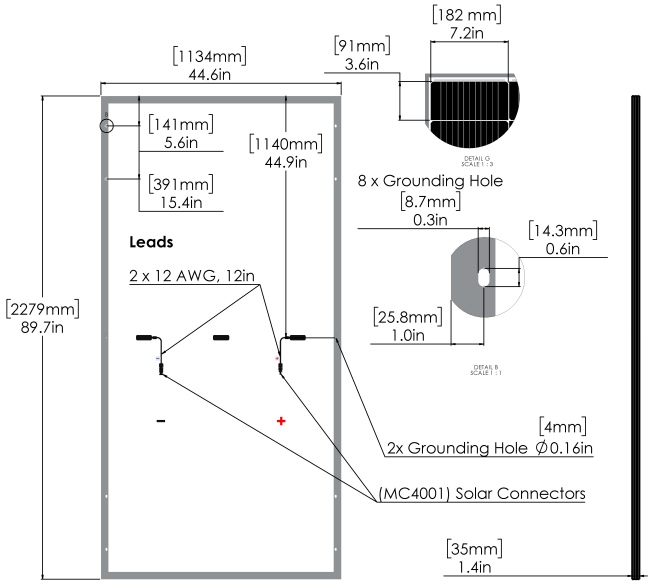
Rated Current	35 A
Maximum Voltage	1500 VDC
Maximum AWG Size	10 AWG
Operating Temperature	-40ºF to 185°F
IP Rating	IP65 / IP68 (1m,1h)

Junction Box

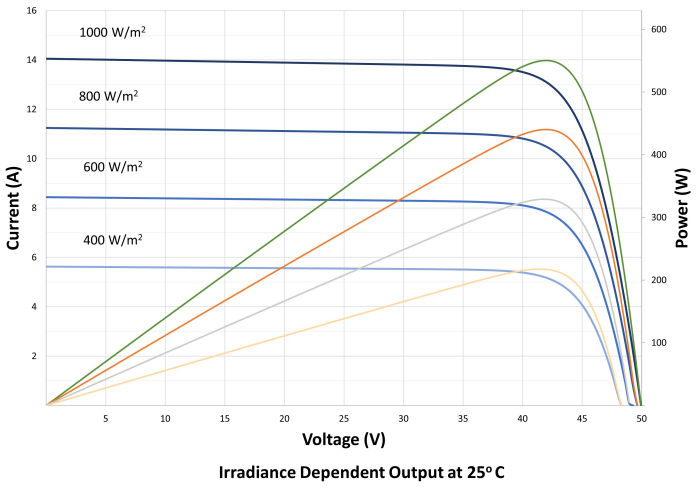
Protection Degree	IP65 / IP68 (1m,1h)
Diode	FMK4530T
Number of Diodes	3 Diode(s)
Output Cables	12 AWG (1 ft long)

Certifications

Module Diagram



Electrical Performance



Irradiance Dependent Output at 25º C

*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