

RNG-80D-SS

80W Monocrystalline Solar Panel

Key Features

The Renogy 80 Watt 12 Vol 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 80 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*	80 W \pm 3%
Optimum Operating Voltage (V_{mp})	18.6 V
Optimum Operating Current (I_{mp})	4.30 A
Open Circuit Voltage (V_{oc})	22.3 V
Short Circuit Voltage (I_{sc})	4.70 A
Module Efficiency	16.75 %
Maximum System Voltage	600 VDC UL
Maximum Series Fuse Rating	15 A

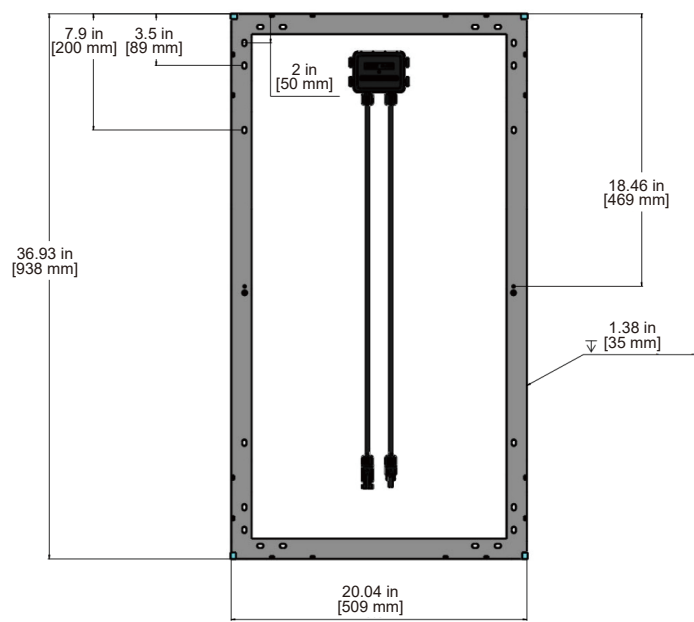
Thermal Characteristics

Operating Temp. Range	-40°C - 80°C (-40°F - 176°F)
Nominal Operating Cell Temperature (NOCT)	47 \pm 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 600mm (23.6 in)

Module Diagram



Mechanical Data

Solar Cell Type	Monocrystalline (6.5 x 3.3 in)
Number of Cells	33 (3 x 11)
Dimensions	938x 509 x 35 mm(36.9x20.0x1.4in)
Weight	5.5 kg(12.1lbs)
Front Glass	Tempered Glass 0.13 in (3.2 mm)
Frame	Anodized Aluminium Alloy
Connectors	Solar Connectors
Fire Rating	Class C

MC4 Connectors

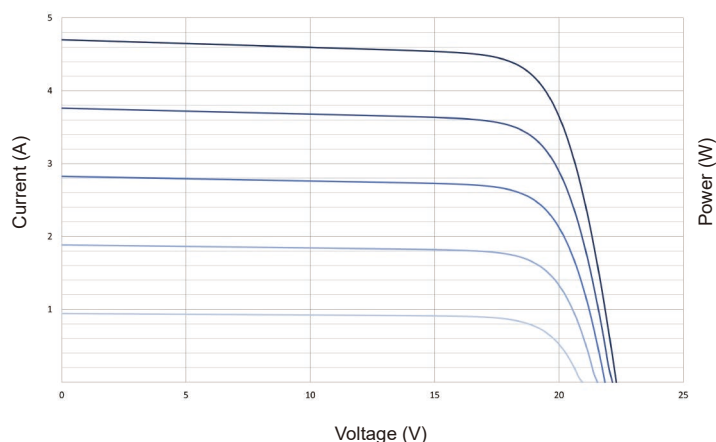
Rated Current	30A
Maximum Voltage	1000V DC
Maximum AWG Size Range	10 AWG
Temperature Range	-40°C - 90°C(-40°F - 194°F)
IP Rating	IP 67

Certifications



IV-Curve

RNG-80D-SS Characteristics Versus Voltage



*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