



# RNG-320D

## 320W Monocrystalline Solar Panel

### Key Features

The Renogy 320W Monocrystalline Solar Panel is the first step to convert your residence to an energy-producing home. The 320W solar panel features a black frame and substantial power output.

- 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

The Renogy 320W monocrystalline solar panel has uses in various off-grid systems. That includes 12 and 24 volts arrays, water pumping systems, signaling systems, and other off-grid applications.



Power Output Warranty



Material and Workmanship Warranty

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## 320W Monocrystalline Solar Panel

### Electrical Data

Maximum Power at STC*	320 W
Optimum Operating Voltage ( $V_{mp}$ )	33.0 V
Optimum Operating Current ( $I_{mp}$ )	9.70 A
Open Circuit Voltage ( $V_{oc}$ )	40.3 V $\pm$ 5%
Short Circuit Voltage ( $I_{sc}$ )	10.23 A $\pm$ 5%
Module Efficiency	19.2 %
Maximum System Voltage	1500 VDC UL
Maximum Series Fuse Rating	20 A

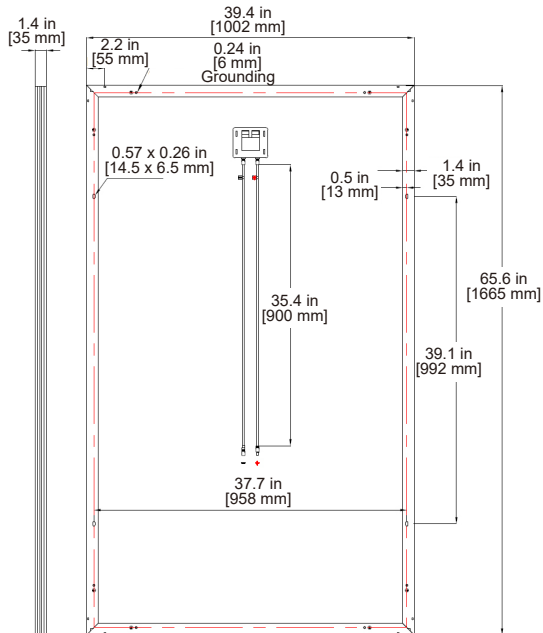
### Thermal Characteristics

Operating Temp. Range	-40°C - 85°C (-40°F - 185°F)
Nominal Operating Cell Temperature (NOCT)	47 $\pm$ 2°C
Temperature Coefficient of Pmax	-0.44%/°C
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Isc	0.04%/°C

### Junction Box

IP Rating	IP 68
Diode Type	THY2550
Number of Diodes	2 Diode(s)
Output Cables	12 AWG 900mm (35.4 in)

### Module Diagram



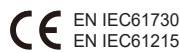
### Mechanical Data

Solar Cell Type	Monocrystalline (6.3 x 6.3 in)
Number of Cells	60 (6 x 10)
Dimensions	1665 x 1002 x 35 mm (65.6 x 39.4 x 1.4 in)
Weight	18 kg (39.7 lbs)
Front Glass	Tempered Glass 0.13 in (3.2 mm)
Frame	Anodized Aluminium Alloy
Connectors	Solar Connectors
Fire Rating	Type 1

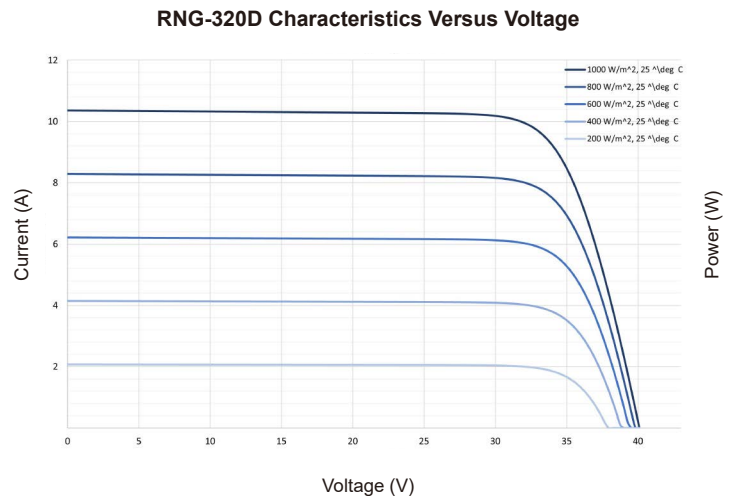
### MC4 Connectors

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



\*All specifications and data described in this data sheet are tested under Standard Test Conditions (STC - Irradiance: 1000W/m<sup>2</sup>, 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](http://www.renogy.com)