



# RNG-160D-SS

160W Monocrystalline Solar Panel

#### **Key Features**

Sleek desgn and a durable frame, the Renogy 160 Watt 12 Volt Monocrystalline Panel provides you with the highest efficiency per area and is the perfect item for off-grid applications.

- 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 160 Watt Monocrystalline Panel can be used in various off-grid applications that include 12 and 24 volts arrays, water pumping systems, signaling systems and other off-grid applications.



Material and Workmanship Warranty

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### **Electrical Data**

Maximum Power at STC*	160 W
Optimum Operating Voltage (V <sub>mp</sub> )	20.2 V
Optimum Operating Current (I <sub>mp</sub> )	7.92 A
Open Circuit Voltage (V <sub>oc</sub> )	22.9 V
Short Circuit Current (I <sub>sc</sub> )	8.37 A
Cell Efficiency	21.0%
Maximum System Voltage	600 VDC UL
Maximum Series Fuse Rating	15 A

### **Thermal Characteristics**

Operating Module Temperature	-40°C to +80°C
Nominal Operating Cell Temerature (NOC1	) 47±2°C
Temperature Coefficient of Pmax	-0.42%/°C
Temperature Coefficient of Voc	-0.31%/°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	12 AWG (2.30 ft long)

## Module Diagram



## Mechanical Data

Solar Cell Type	e Monocrystalline (6.10 x 6.10in)
Number of Cel	lls 32 (4 x 8)
Dimensions	51.3 x 25.9 x 1.38 in (1304 x 657 x 35 mm)
Weight	22.1 lbs (10 kg)
Front Glass	Tempered Glass 0.13 in (3.2 mm)
Frame	Anodized Aluminium Alloy
Connectors	MC4 Connectors
Fire Rating	Class C

## MC4 Connectors

Rated Current	30A
Maximum Voltage	1000VDC
Maximum AWG Size Range	10 AWG
Temperature Range	-40°F to 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