

# **RNG-175D** 175W Monocrystalline Solar Panel

#### **Key Features**

This module features a sleek design and a durable frame, strengthened by corner supports. The Renogy 175 Watt 12 Volt Monocrystalline Panel provides you with the highest power efficiency per area and offers the perfect solar module for off-grid renewable energy 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 175 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.

# 25 **Power Output Warranty** Years 5 'ears

Material and Workmanship Warranty

# RNG-175D 175W Monocrystalline Solar Panel

#### **Electrical Data**

Maximum Power at STC*	175 W
Open Circuit Voltage (V <sub>oc</sub> )	21.6 V
Short Circuit Current (I <sub>sc</sub> )	10.35 A
Optimum Operating Voltage (V <sub>mp</sub> ) Optimum Operating Current (I <sub>mp</sub> )	17.95 V
Optimum Operating Current (I <sub>mp</sub> )	9.75 A
Module Efficiency	19.8%
Maximum System Voltage	1000 VDC UL
Maximum Series Fuse Rating	15 A

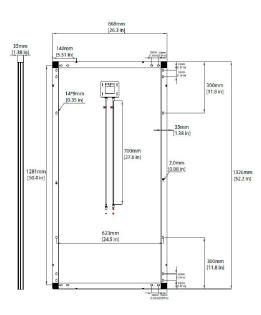
### **Thermal Characteristics**

Operating Module Temperature	-40°C to +176 °F
Nominal Operating Cell Temerature (NOC	T) 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	15SQ045
Number of Diodes	2 Diode(s)
Output Cables	14 AWG (2.30 ft long)

# Module Diagram



# Mechanical Data

Solar Cell Type	
Number of Cel	ls 32 (4 x 8)
Dimensions	52.2 x 26.3 x 1.38 in (1326 x 668 x 35 mm)
Weight	19.8 lb (9 kg)
Front Glass	Tempered Glass 0.13 in (3.2 mm)
Frame	Anodized Aluminum Alloy
Connectors	Solar Connectors
Fire Rating	Class A

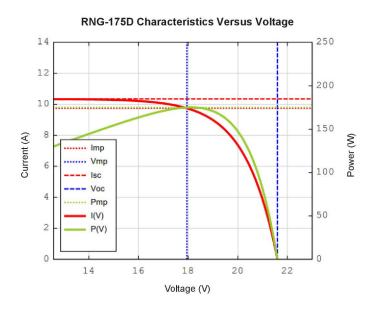
## MC4001 - Solar Connectors

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