



# RNG-80D-SS

## 80W Monocrystalline Solar Panel

### Key Features

Sleek design and a durable frame, the Renogy 80 Watt 12 Volt Monocrystalline Panel provides you with the most efficiency per space 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 80 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.



Power Output Warranty



Material and Workmanship Warranty

# RNG-80D-SS

## 80W Monocrystalline Solar Panel

### Electrical Data

|                                        |            |
|----------------------------------------|------------|
| Maximum Power at STC*                  | 80 W       |
| Optimum Operating Voltage ( $V_{mp}$ ) | 20.9 V     |
| Optimum Operating Current ( $I_{mp}$ ) | 3.85 A     |
| Open Circuit Voltage ( $V_{oc}$ )      | 24.3 V     |
| Short Circuit Voltage ( $I_{sc}$ )     | 3.98 A     |
| Cell Efficiency                        | 21.0%      |
| Maximum System Voltage                 | 600 VDC UL |
| Maximum Series Fuse Rating             | 15 A       |

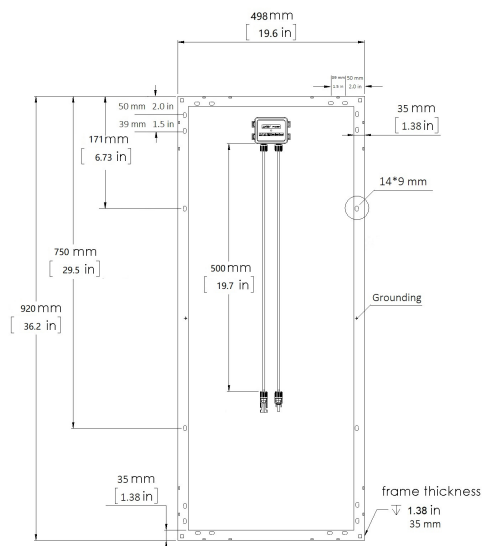
### Thermal Characteristics

|                                           |                |
|-------------------------------------------|----------------|
| Operating Module Temperature              | -40°C to +90°C |
| Nominal Operating Cell Temperature (NOCT) | 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 (1.64 ft long) |

### Module Diagram



### Mechanical Data

|                 |                                           |
|-----------------|-------------------------------------------|
| Solar Cell Type | Monocrystalline (6.1 x 3.0 in)            |
| Number of Cells | 33 (3 x 11)                               |
| Dimensions      | 36.2 x 19.6 x 1.38 in (920 x 498 x 35 mm) |
| Weight          | 11.9 lbs (5.4 kg)                         |
| Front Glass     | Tempered Glass 0.13 in (3.2 mm)           |
| Frame           | Anodized Aluminium Alloy                  |
| Connectors      | MC4 Connectors                            |
| Fire Rating     | Class C                                   |

### MC4 Connectors

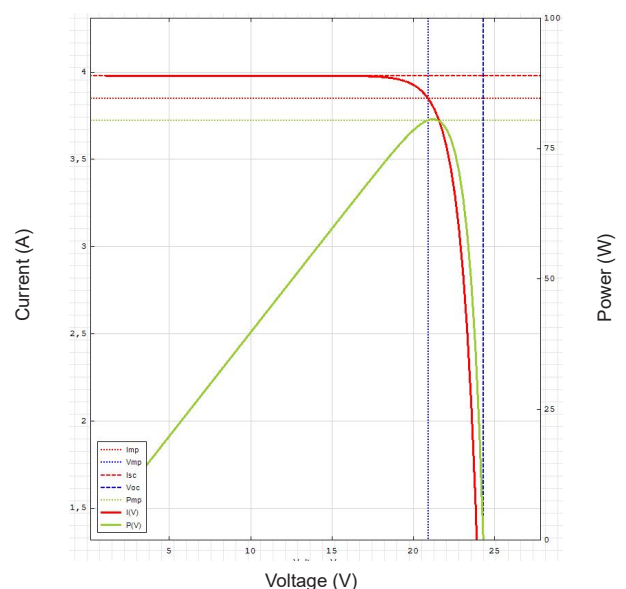
|                        |                |
|------------------------|----------------|
| Rated Current          | 30A            |
| Maximum Voltage        | 1000VDC        |
| Maximum AWG Size Range | 10 AWG         |
| Temperature Range      | -40°F to 194°F |
| IP Rating              | IP 67          |

### Certifications



### IV-Curve

RNG-80D-SS Characteristics Versus Voltage



\*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)

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Follow proper safety practices. If in doubt, consult a professional RV technician.