



RNG-160P

160W Polycrystalline Solar Panel

Key Features

Sleek design and a durable frame, the Renogy 160 Watt 12 Volt Polycrystalline 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 Polycrystalline 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-160P

160W Polycrystalline Solar Panel

Electrical Data

| | |
|--|------------|
| Maximum Power at STC* | 160 W |
| Optimum Operating Voltage (V_{mp}) | 18.6 V |
| Optimum Operating Current (I_{mp}) | 8.6 A |
| Open Circuit Voltage (V_{oc}) | 22.8 V |
| Short Circuit Current (I_{sc}) | 9.47 A |
| Cell Efficiency | 18.5% |
| Maximum System Voltage | 600 VDC UL |
| Maximum Series Fuse Rating | 15 A |

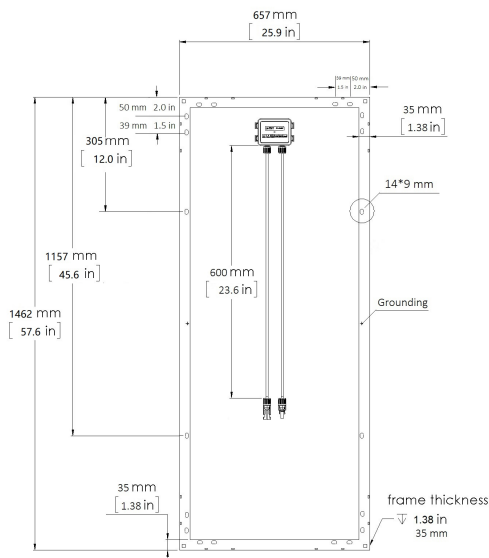
Thermal Characteristics

| | |
|---|----------------|
| Operating Module Temperature | -40°C to +80°C |
| Nominal Operating Cell Temperature (NOCT) | 47±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 65 |
| Diode Type | HY 10SQ050 |
| Number of Diodes | 2 Diode(s) |
| Output Cables | 12 AWG (2.40 ft long) |

Module Diagram



Mechanical Data

| | |
|-----------------|--|
| Solar Cell Type | Polycrystalline (6.10 x 6.10in) |
| Number of Cells | 36 (4 x 9) |
| Dimensions | 57.6 x 25.9 x 1.38 in (1462 x 657 x 35 mm) |
| Weight | 25.4 lbs (11.5 kg) |
| Front Glass | Tempered Glass 0.13 in (3.2 mm) |
| Frame | Anodized Aluminium Alloy |
| Connectors | MC4 Connectors |
| Fire Rating | Class C |

MC4 Connectors

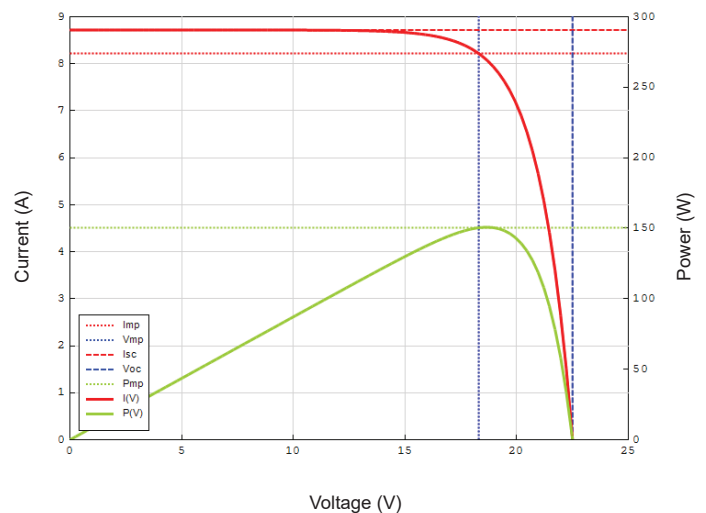
| | |
|------------------------|----------------|
| Rated Current | 30A |
| Maximum Voltage | 1000VDC |
| Maximum AWG Size Range | 10 AWG |
| Temperature Range | -40°F to 194°F |
| IP Rating | IP 67 |

Certifications



IV-Curve

RNG-160P 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