



RSP320DC-BK

320W Monocrystalline Solar Panel

Key Features

The Renogy 320 Watt Monocrystalline Solar Panel features a sleek and durable frame design. This solar panel uses high-efficiency monocrystalline silicon solar cells and frame corner supports for outdoor protection.

- 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

Renogy Solar Panels have applications in residential solar power arrays, water pumping systems, signaling systems, and plenty of other applications. The Renogy 320 Watt solar panel offers a feasible off-grid renewable energy solution for rooftop, RV, boat, and outdoor power systems.



Power Output Warranty



Material and Workmanship Warranty

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Electrical Data

Maximum Power at STC*	320 W
Optimum Operating Voltage (V_{mp})	37.85 V
Optimum Operating Current (I_{mp})	8.46 A
Open Circuit Voltage (V_{oc})	43.82 V
Short Circuit Voltage (I_{sc})	8.92A
Module Efficiency	22.2 %
Maximum System Voltage	1000 VDC
Maximum Series Fuse Rating	20 A

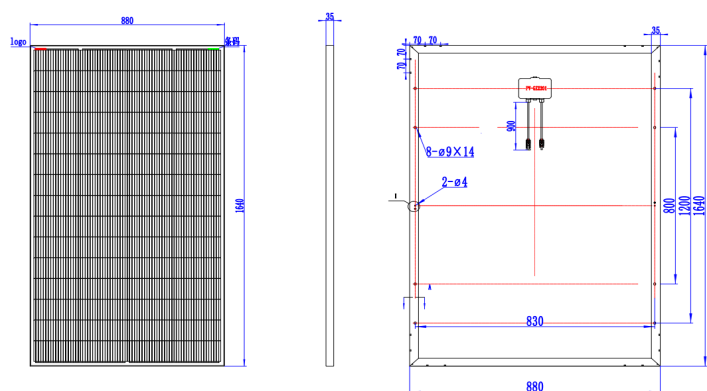
Thermal Characteristics

OperatingTemp. Range	-40°C - 85°C(-40°F - 185°F)
Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.32%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	0.046%/°C

Junction Box

IP Rating	IP 68
Diode Type	30SQ045T
Number of Diodes	2 Diode(s)
Output Cables	12 AWG 900mm (35.4 in)

Module Diagram



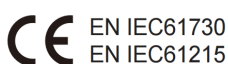
Mechanical Data

Solar Cell Type	Monocrystalline (8.3 x 4.1 in)
Number of Cells	60 (4 x 15)
Dimensions	1640 x 880 x 35mm(64.6 x 34.7 x 1.4in)
Weight	14.9 kg(32.9 lbs)
Front Glass	Tempered Glass 0.13 in (3.2 mm)
Frame	Anodized Aluminium Alloy
Connectors	Solar Connectors
Fire Performance	Type 1

Solar Connectors

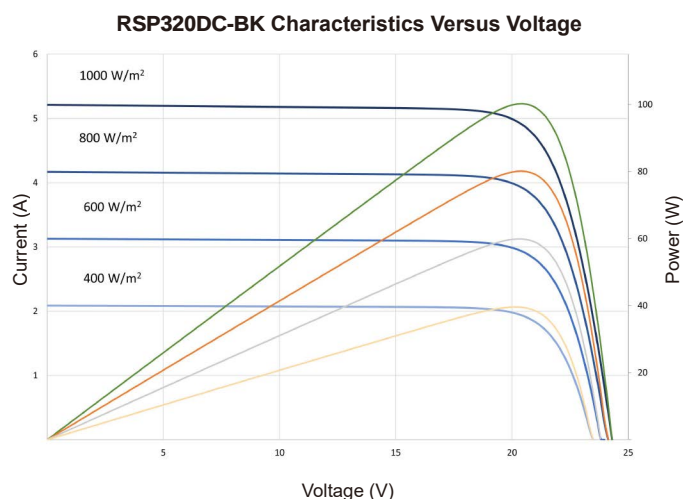
Rated Current	22A
Maximum Voltage	1000V DC
Maximum AWG Size Range	12 AWG
Temperature Range	-40°C - 90°C(-40°F - 194°F)
IP Rating	IP 68

Certifications



ISO 9001:
Quality Management System

IV-Curve



*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