

Description

Renogy Bifacial Solar Panels are designed to deliver higher energy output in compact, real-world installations. Featuring a bifacial design, the panel captures sunlight from both the front and rear sides, enabling up to 30% additional energy generation compared to standard solar panels, depending on installation conditions.

Built with premium Grade A+ N-Type monocrystalline cells, the panel offers improved conversion efficiency up to 25%, enhanced performance in high-temperature and low-light environments, and reduced long-term degradation. Pre-drilled mounting holes enable quick installation and are suitable for a wide range of off-grid applications, including RVs, cabins, and mobile energy systems.

Key Features

■ Bifacial Boost for 30% Extra Energy

Capture reflected light from both sides to gain up to 30% more power in environments like sand, snow, or light-colored surfaces, without extra effort or repositioning.

■ Maximum Output with Next-Gen N-Type Cells

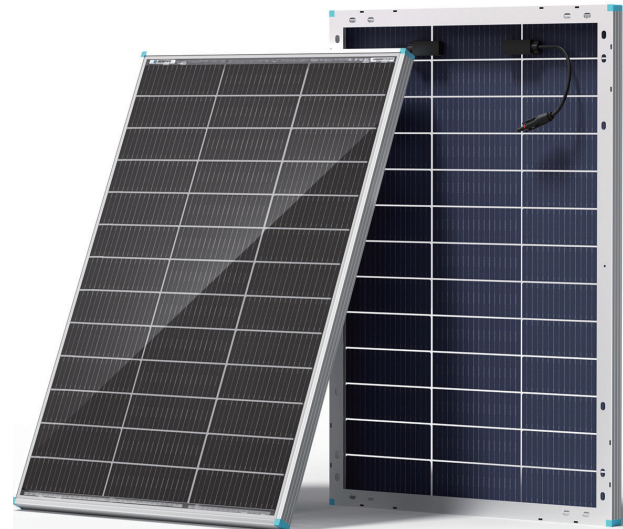
High-efficiency 16BB N-Type cells deliver more energy per square foot, helping you maximize output even when installation space is limited. Up to 25% cell efficiency delivers higher power output than traditional panels.

■ Compact & Flexible for Any Setup

Designed for tight spaces and real-world setups, this compact panel fits easily on RV roofs and can be placed or repositioned for optimal sunlight, making it perfect for both fixed and portable setups.

■ Improved Performance in Partial Shading

The half-cut cell parallel design (200W only) divides the panel into two independent power zones, allowing one side to keep generating power even if the other is shaded, reducing power loss in real-world conditions.



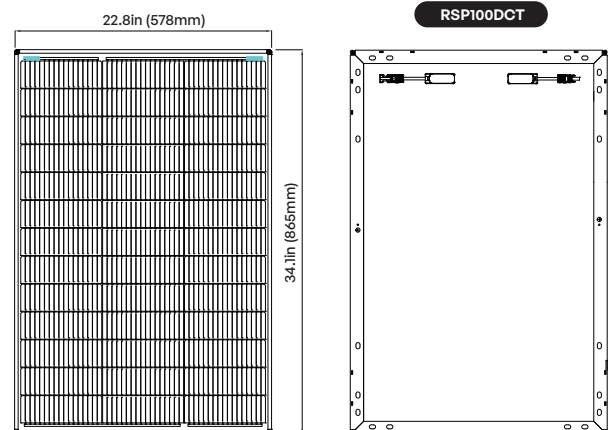
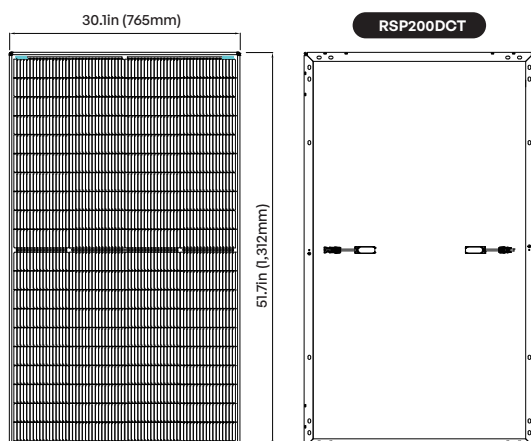
■ Stable Output in Real Conditions

Maintains consistent performance in heat, low-light, and changing outdoor conditions with lower temperature coefficient and LECO tech, so you get reliable power throughout the day.

■ Built to Deliver Reliable Power for Years

Engineered with IP68 durable materials, low-degradation N-Type cells, and a reinforced structure, this panel delivers consistent performance over time, backed by a 10-year product warranty and a long-term power output guarantee.

Module Diagram



Technical Specifications

Electrical Data

Model	RSP200DCT	RSP100DCT
Maximum Power at STC	200W	100W
Optimum Operating Voltage (Vmp)	25V	23.6V
Optimum Operating Current (Imp)	8A	4.24A
Open-Circuit Voltage (Voc)	29.6V	28.5V
Short-Circuit Current (Isc)	8.7A	4.45A
Module Efficiency	19.9%	20.0%
Maximum System Voltage	600VDC	600VDC
Maximum Series Fuse Rating	25A	25A

Mechanical Data

	RSP200DCT	RSP100DCT
Solar Cell Type	Mono N-Type	Mono N-Type
Number of Cells	80 (10 x 4 x 2)	39 (13 x 3)
Dimensions	51.7 x 30.1 x 1.2in / 1,312 x 765 x 30mm	34.1 x 22.8 x 1.2in / 865 x 578 x 30mm
Weight	22.71 lbs / 10.3kg	11.97 lbs / 5.43kg
Front Film	Tempered Glass 0.13in / 3.2mm	Tempered Glass 0.13in / 3.2mm
Connectors	Solar Connectors	Solar Connectors
Frame	Anodized Aluminum Alloy	Anodized Aluminum Alloy
Fire Performance	Type I	Type I

Thermal Characteristics

	RSP200DCT	RSP100DCT
Operating Temperature Range	-40°F to 185°F / -40°C to 85°C	-40°F to 185°F / -40°C to 85°C
Nominal Operating Cell Temperature	45±2°C	45±2°C
Temperature Coefficient of Pmax	-0.32%/°C	-0.32%/°C
Temperature Coefficient of Voc	-0.26%/°C	-0.26%/°C
Temperature Coefficient of Isc	0.046%/°C	0.046%/°C

MC4 Connectors

	RSP200DCT	RSP100DCT
Maximum Voltage	1,500VDC	1,500VDC
Rated Current	30A	30A
Temperature Range	-40°F to 185°F / -40°C to 85°C	-40°F to 185°F / -40°C to 85°C
IP Rating	IP68	IP68

Junction

	RSP200DCT	RSP100DCT
IP Rating	IP68	IP68
Number of Diodes	2	2
Output Cables	14 AWG 39.4in / 1,000mm	14 AWG 23.6in / 600mm

Warranty

	RSP200DCT	RSP100DCT
Power Output Warranty	25-Year	25-Year
Material and Workmanship Warranty	10-Year	10-Year
Certification	CE, RCM, TSCA, CA65	CE, RCM, TSCA, CA65

All specifications and data described in this data sheet are tested under Standard Test Conditions (STC - Irradiance: 1,000W/m², Temperature: 25°C, Air Mass: 1.5) and may deviate marginally from actual values. Renogy and any of its affiliates have 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 datasheets can be found in the downloads section of our website, www.renogy.com.