

Description

100W Slim Solar Panels feature a narrow, elongated form factor that maximizes usable area in space-constrained installations. The slim geometry supports flexible layouts on RV rooftops, commercial vehicles, and custom mounting surfaces where standard panel formats are not suitable.

Available in both N-Type and PERC cell options, the 100W Slim panel expands system design flexibility while maintaining electrical compatibility and stable power output.

Key Features

■ Slim Design for Space-Limited Rooftop

Designed to fit around rooftop obstacles and tight spaces, the panel's slim body makes it easy to maneuver and install.

■ High Conversion Efficiency

Available with N-Type cells up to 25% conversion efficiency or PERC cells up to 23%, supporting different system requirements.

■ Easy Installation

Optimized dimensions and standard mounting interfaces support straightforward installation on vehicles and custom surfaces.

■ Durable Construction for Outdoor Use

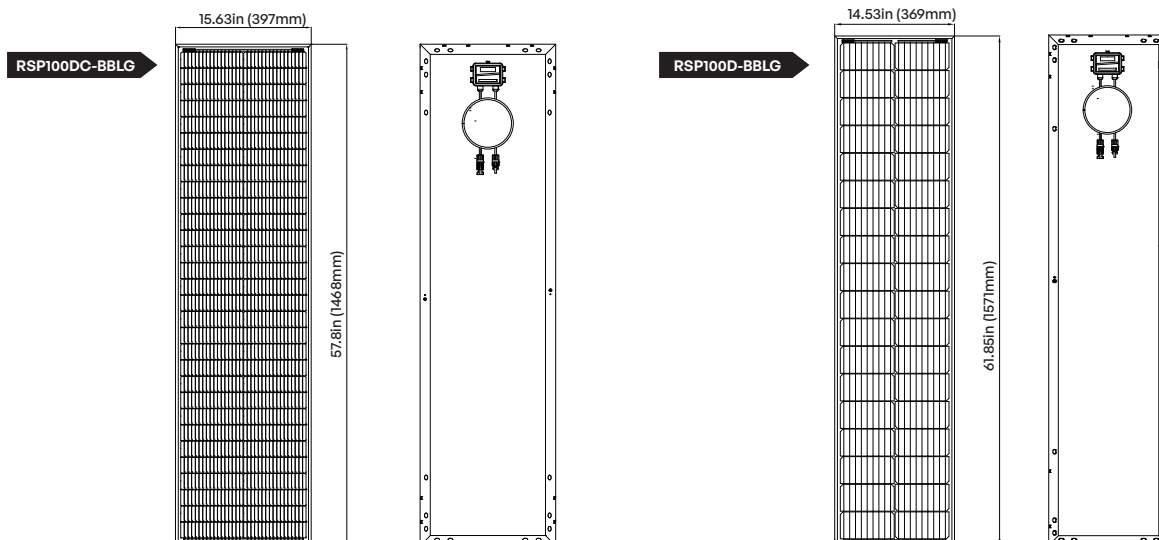
IP67 protection with low-iron tempered glass and corrosion-resistant aluminum frames, designed for stable performance in harsh outdoor conditions.

■ Long-Term Reliability

Low degradation rates of $\leq 1\%$ in the first year and $\leq 0.4\%$ annually, with a 25-year guarantee of 80% output for sustained power delivery.



Module Diagram



Technical Specifications

Electrical Data

Model	RSP100DC-BBLG	RSP100D-BBLG
Maximum Power at STC*	100W	100W
Optimum Operating Voltage (Vmp)	18.2V	20.92V
Optimum Operating Current (Imp)	5.50A	4.78A
Open-Circuit Voltage (Voc)	21.86V	24.66V
Short-Circuit Current (Isc)	6.75A	5.17A
Module Efficiency	17.2%	17.3%
Maximum System Voltage	600VDC	600VDC
Maximum Series Fuse Rating	15A	15A

Mechanical Data

Solar Cell Type	Mono N-Type	Mono PERC
Number of Cells	60 (30 x 2)	36 (18 x 2)
Dimensions	57.8 x 15.63 x 1.18in / 1,468 x 397 x 30mm	61.85 x 14.53 x 1.18in / 1,571 x 369 x 30mm
Weight	14.93 lbs / 6.77kg	14.55 lbs / 6.6kg
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

Operating Temp. 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	-0.38%/°C
Temperature Coefficient of Voc	-0.26%/°C	-0.28%/°C
Temperature Coefficient of Isc	0.046%/°C	0.048%/°C

MC4 Connectors

Maximum Voltage	1,000VDC	1,000VDC
Rated Current	22A	22A
Temperature Range	-40°F to 194°F / -40°C to 90°C	-40°F to 194°F / -40°C to 90°C
IP Rating	IP67	IP67

Junction

IP Rating	IP65	IP65
Output Cables	14 AWG 39.4in / 1,000mm	14 AWG 39.4in / 1,000mm

Warranty

Power Output Warranty	25-Year	25-Year
Material and Workmanship Warranty	10-Year	10-Year
Certification	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.