

Description

Flexible solar panels are suitable for curved surfaces and weight-limited installations where drilling is not ideal. They conform to vehicle roofs and other non-flat surfaces for a cleaner, lower-profile fit.

Ultra-thin and lightweight, with the capability to bend up to 240 degrees, flexible solar panels are around 70% lighter than their traditional rigid counterpart. With an IP67-rated junction box and solar connectors, flexible panels deliver dependable outdoor performance.

Key Features

■ Extreme Flexibility Up to 240°

Supports bending up to 240° (248° for RNG-175DB-H) for curved and irregular surfaces where rigid panels are not applicable.

■ 70% Lighter, Easier to Install

Advanced polymer materials reduce weight by approximately 70% compared to conventional panels, simplifying transport and installation.

■ Ultra-Thin Lamination

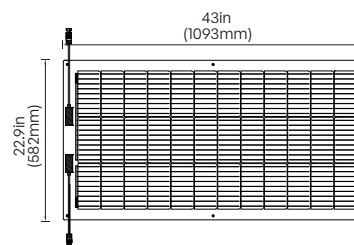
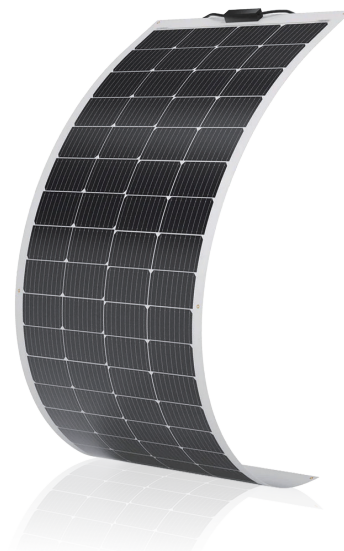
Well laminated with 0.08in-thick ETFE material. The anti-scratch, durable ETFE film protects the cell for outdoor use, and its high transparency enhances conversion rates.

■ High Daily Energy Yield

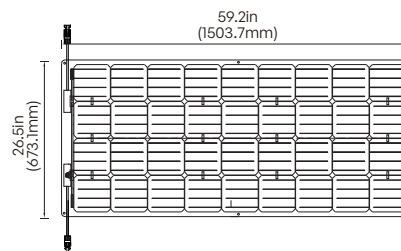
9BB PERC cells with half-cut technology enhance energy conversion efficiency and reduce thermal and shading-related power loss.

■ Quick and Cost-Effective Mounting

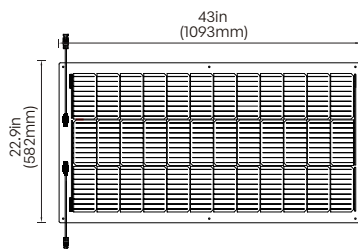
This panel comes with pre-drilled mounting holes and is compatible with silicone structural adhesive, enabling simple, drill-free installation.



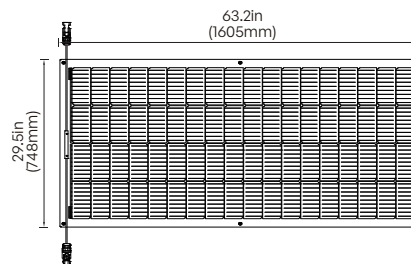
RSP100DL-36



RNG-175DB-H



RNG-100DB-H



RSP200DB-72

Module Diagram

Technical Specifications

Electrical Data

Model	RNG-100DB-H	RSP100DL-36	RNG-175DB-H	RSP200DB-72
Maximum Power at STC	100W	100W	175W	200W
Optimum Operating Voltage (Vmp)	20.7V	19.4V	19.5V	20.1V
Optimum Operating Current (Imp)	4.84A	5.20A	8.98A	10.02A
Open-Circuit Voltage (Voc)	24.4V	23.5V	23.9V	23.9V
Short-Circuit Current (Isc)	5.16A	5.51A	9.5A	10.74A
Module Efficiency	15.70%	15.70%	17.30%	16.70%
Maximum System Voltage	600VDC	600VDC	600VDC	600VDC
Maximum Series Fuse Rating	15A	15A	15A	15A

Mechanical Data

Solar Cell Type	Mono PERC	Mono PERC	Mono PERC	Mono PERC
Number of Cells	36 (3 x 12)	36 (3 x 12)	36 (4 x 9)	72 (18 x 4)
Dimensions	43.0 x 22.9 x 0.1in 1,093 x 582 x 3mm	43.0 x 22.9 x 0.1in 1,093 x 582 x 3mm	59.2 x 26.5 x 0.1in 1,503.7 x 673.1 x 2.5mm	63.2 x 29.5 x 0.1in 1,605 x 748 x 3mm
Weight	3.97 lbs / 1.8kg	5.3 lbs / 2.4kg	6.2 lbs / 2.8kg	10.8 lbs / 4.9kg
Front Film	TPO	TPO	TPO	TPO
Connectors	Solar Connectors	Solar Connectors	Solar Connectors	Solar Connectors
Fire Performance	Type I	Type I	Type I	Type I
Certification	CE	CE	CE	CE
Material and Workmanship Warranty	5-Year	5-Year	5-Year	5-Year

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	-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	45±2°C	45±2°C
Temperature Coefficient of Pmax	-0.29%/°C	-0.29%/°C	-0.29%/°C	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C	-0.25%/°C	-0.25%/°C	-0.25%/°C
Temperature Coefficient of Isc	0.05%/°C	0.05%/°C	0.05%/°C	0.05%/°C

MC4 Connectors

Maximum Voltage	1,500VDC	1,500VDC	1,500VDC	1,000VDC
Rated Current	30A	30A	30A	30A
Maximum AWG Size Range	12 AWG	12 AWG	12 AWG	12 AWG
Temperature Range	-40°F to 185°F -40°C to 85°C	-40°F to 185°F -40°C to 85°C	-40°F to 185°F -40°C to 85°C	-40°F to 185°F -40°C to 85°C
IP Rating	IP67	IP67	IP67	IP68

Junction

IP Rating	IP67	IP67	IP67	IP67
Output Cables	22 AWG 27.6in / 700mm	22 AWG 27.6in / 700mm	22 AWG 27.6in / 700mm	22 AWG 27.6in / 700mm