RICH SOLAR | MEGA™ Series Solar Panels

MEGA 50 FLEX

50W 12V FLEXIBLE SOLAR PANEL

22.8%
Maximum Cell Efficiency

50W
Maximum Power Output

0~+5W
Positive Power Tolerance



MEGA 50 FLEX (MODEL: RS-F50B)

Maximum Efficiency

Multi-busbar cell technology improves light trapping, reduces series resistance, and enhances current collection.

Superior low-light performance and a low temperature coefficient maintain strong output in varied weather conditions.

Proven Reliability

Delivers consistent energy production even on cloudy days or during mornings and evenings.

Innovative non-destructive cutting technology minimizes micro-cracks for greater durability.

PID resistance is ensured through advanced cell processing and premium module material control.

All-weather protection with IP68 waterproof rating ensures long-term outdoor performance.

Mechanical strength certified up to 5400 Pa positive load and 2400 Pa negative load.

Easy Installation

Plug-and-play solar connectors support both series and parallel configurations.

Extremely lightweight design allows for easy handling and transport.

Pre-drilled holes support flexible mounting options.

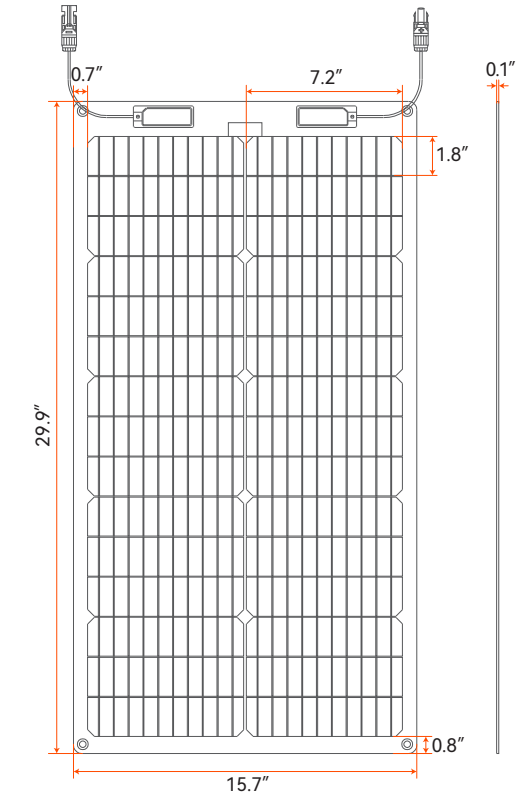
Bendable ends up to 40° on each side allow the panel to conform to curved surfaces for versatile installation.

Ultra-thin 0.1" profile for sleek appearance and minimal weight.

Ideal for high-end off-grid systems and mobile setups including RVs, vans, trailers, overlanders, curved roofs, and boats.

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DIMENSIONS





* Actual dimensions may vary by ±0.1 in.

ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)	50W
Power Output Tolerance-PMAX (W)	0~+5W
Maximum Power Voltage-VMPP (V)	18.3V
Maximum Power Current-IMPP (A)	2.96A
Open Circuit Voltage-VOC (V)	22.2V
Short Circuit Current-ISC (A)	3.20A
Maximum System Voltage	1500V
Temperature Range	-40~+185°F
Maximum Series Fuse Rating	15A
Module Efficiency η m (%)	16.4%

STC: Irradiance 1000 W/m², Cell Temperature 25 °C, Air Mass AM = 1.5

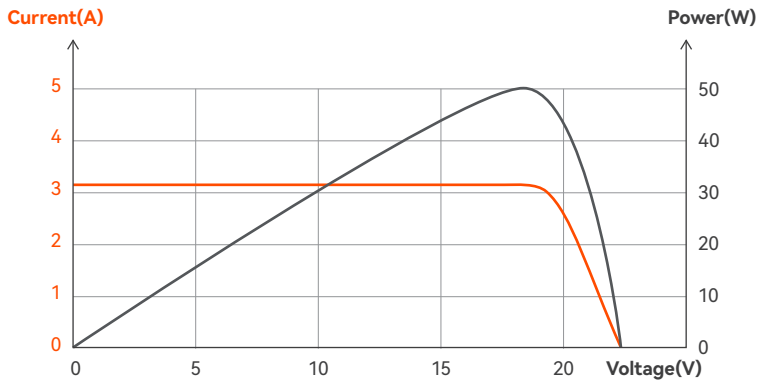
MECHANICAL DATA

Solar Cells Type	Monocrystalline 7.2 × 1.8 in (182 × 45.5 mm)
Module Dimensions	29.9 × 15.7 × 0.1 in (760 × 400 × 2.2 mm)
Cell Orientation	30 cells (2 × 15)
Weight	2.6 lb (1.2 kg)
Glass	4 mm² (IEC), 12 AWG (UL)
Backsheet	Black
Connector	Solar Connectors
Junction Box	IP 68 rated
Cables	35.4 in (900 mm) Length

TEMPERATURE RATINGS

Temperature Coefficient of PMAX	-0.35%/°C
Temperature Coefficient of VOC	-0.28%/°C
Temperature Coefficient of ISC	0.045%/°C

CURVE CHARACTERISTICS



SPECIFICATIONS INCLUDED IN THIS DATASHEET ARE SUBJECT TO CHANGE WITHOUT NOTICE.