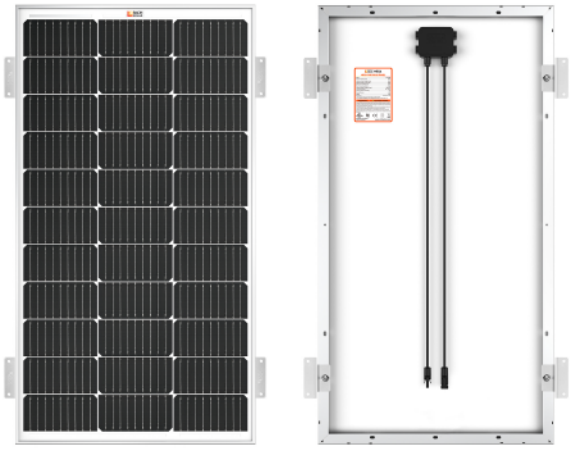
RICH SOLAR | MEGA™ Series Solar Panels

MEGA 100 / MEGA 100 ONYX WITH 3/4" Z BRACKETS
100W 12V SOLAR PANEL

22.6%
Maximum Cell Efficiency

100W
Maximum Power Output

0~±5W
Positive Power Tolerance



MEGA 100 WITH 3/4" Z BRACKETS
(MODEL: RS-M100-MB-44)



MEGA 100 ONYX WITH 3/4" Z BRACKETS
(MODEL: RS-M100B-MB-44)

Maximum Efficiency

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

High-transmission, AR-coated tempered glass maximizes sunlight capture while ensuring long-term durability.

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

Easy Installation

Comes with four pre-installed 3/4 in anodized aluminum Z-brackets and mounting hardware for quick and secure installation.

Pre-drilled frame holes and slotted bracket holes allow for easy alignment and installation.

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

The lightweight, corrosion-resistant aluminum frame and mounting brackets provide easy handling and long-lasting outdoor durability.

Ideal for RVs, cabins, boats, sheds, and other off-grid applications.

Proven Reliability

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

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

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

Built to withstand harsh environments including salt, ammonia, sand, high temperatures, and high humidity.

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

Exceptional Value

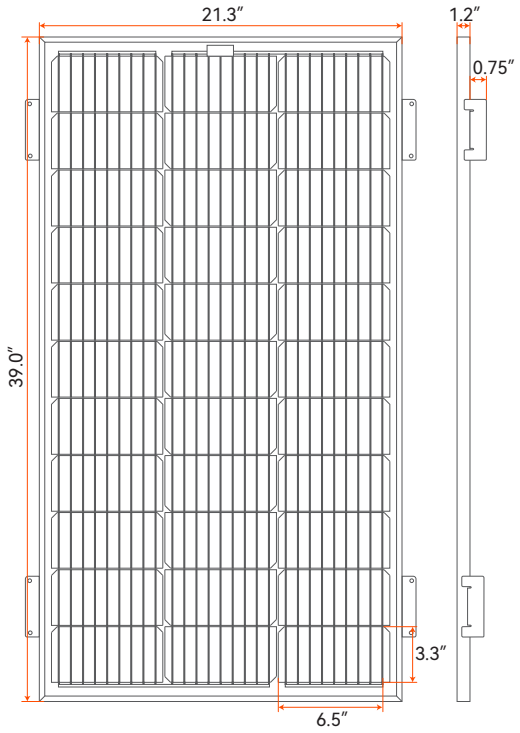
Delivers higher performance, greater savings, and long-term satisfaction.

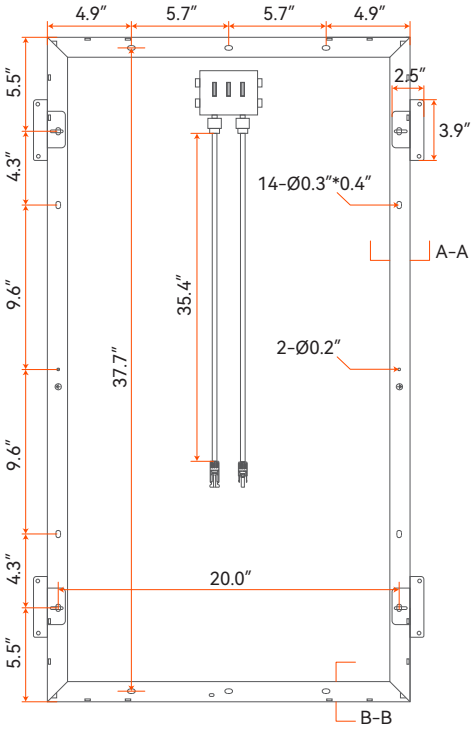
Backed by a 25-year power output warranty.

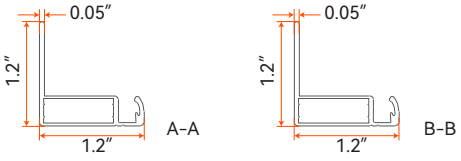
Protected by a 10-year limited workmanship warranty.

© 2026 RICH SOLAR ALL RIGHTS RESERVED

DIMENSIONS







* Actual dimensions may vary by ±0.1 in.

ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)	100 W
Power Output Tolerance	±5%
Maximum Power Voltage-VMPP (V)	18.6 V
Maximum Power Current-IMPP (A)	5.38 A
Open Circuit Voltage-VOC (V)	22.8 V
Short Circuit Current-ISC (A)	5.78 A
Maximum System Voltage	1000 VDC
Temperature Range	-40~+185°F
Maximum Series Fuse Rating	10 A
Module Efficiency η m (%)	18.1 %

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

MECHANICAL DATA

Solar Cells Type	Monocrystalline 6.5 × 3.3 in (166 × 83 mm)
Module Dimensions	39.0 × 21.3 × 1.2 in (990 × 540 × 30 mm)
Cell Orientation	33 cells (3 × 11)
Weight	13.2 lb (6 kg)
Glass	3.2 mm (0.13 in), High Transmission, AR Coated Tempered Glass
Backsheet	White / Black
Connector	Solar Connectors
Frame	Anodized Aluminum Alloy
Junction Box	IP 67 rated
Cables	Photovoltaic Technology Cable 4.0 mm² (#12 gauge), 35.4 in (900 mm) Length

TEMPERATURE RATINGS

Nominal Module Operating Temperature (NMOT)	45°C ± 2°C
Temperature Coefficient of PMAX	-0.35%/°C
Temperature Coefficient of VOC	-0.28%/°C
Temperature Coefficient of ISC	0.045%/°C

CURVES OF PV MODULE

