

# MEGA SERIES

## 250W PRO ONYX SOLAR PANEL

MODEL: RS-M250PB

**25.1%**

Maximum Efficiency

**250W**

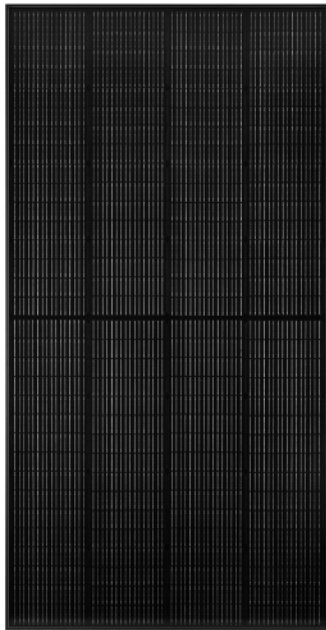
Maximum Power Output

**0~+5W**

Positive Power Tolerance

**IP68**

Waterproof Rate



## FEATURES

### Advanced Design and Technology

16 busbar solar cell enhances light absorption, achieving 25.1% efficiency.

128 cell monocrystalline module delivers a 250W maximum power output.

High-transmission, AR-coated tempered glass maximizes sunlight capture and ensures durability.

Plug-and-play junction box allows for quick and easy installation.

Industry-standard quick-connect cables support series and parallel connections.

### Easy Installation and Versatility

Lightweight anodized aluminum frame is durable, corrosion-resistant, and easy to handle.

Pre-drilled holes compatible with ground mounts, Z brackets, pole mounts, and tilt mounts.

Works seamlessly with both on-grid and off-grid inverters.

Ideal for high-end off-grid systems and mobile applications.

### Superior Performance and Reliability

Excellent low-light performance even on cloudy days or during mornings and evenings.

Over 30 in-house tests (UV, TC, HF, etc.) guarantee durability and performance.

PID-resistant design and 100% EL double inspection prevent micro-cracks and ensure module integrity.

Certified to withstand 2400 Pa wind load, 5400 Pa snow load, and 35 mm hail stones at 97 km/h.

### Long-Term Warranty and Support

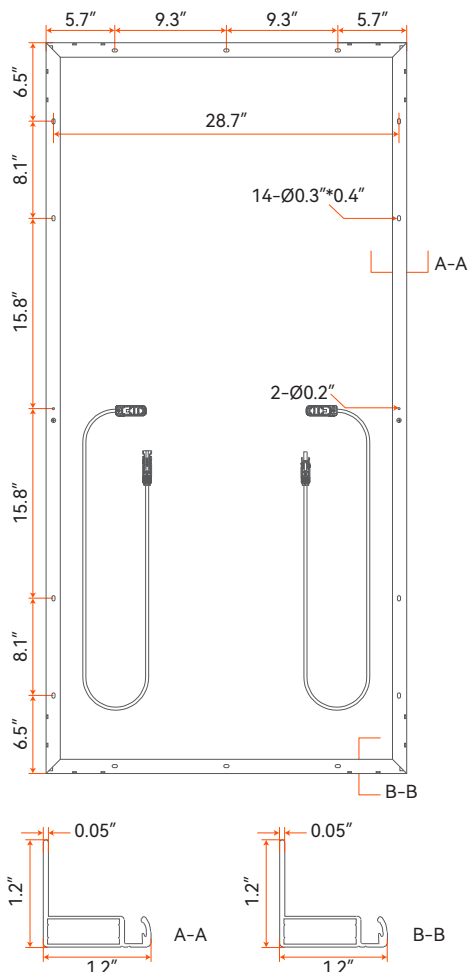
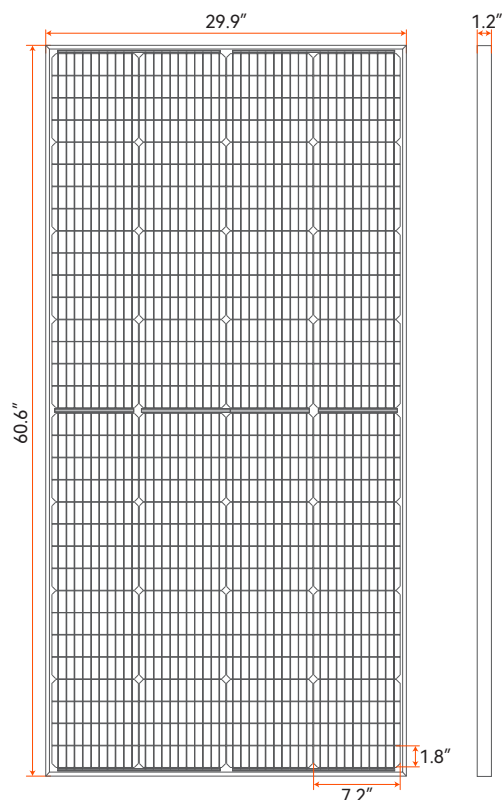
25-year limited product warranty ensures reliability.

25-year performance warranty guarantees minimal degradation.

Refer to the product warranty documentation for detailed terms.



## DIMENSIONS



## ELECTRICAL DATA (STC)

|                                                                                   |          |
|-----------------------------------------------------------------------------------|----------|
| Peak Power Watts-PMAX (Wp)                                                        | 250 W    |
| Power Output Tolerance-PMAX (W)                                                   | 0~+5 W   |
| Maximum Power Voltage-VMPP (V)                                                    | 36.9 V   |
| Maximum Power Current-IMPP (A)                                                    | 6.78 A   |
| Open Circuit Voltage-VOC (V)                                                      | 44.7 V   |
| Short Circuit Current-ISC (A)                                                     | 7.24 A   |
| Maximum System Voltage                                                            | 1500 VDC |
| Maximum Series Fuse Rating                                                        | 20 A     |
| Module Efficiency $\eta_m$ (%)                                                    | 20.7 %   |
| STC: Irradiance 1000 W/m <sup>2</sup> , Cell Temperature 25 °C, Air Mass AM = 1.5 |          |

## MECHANICAL DATA

|                   |                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------|
| Solar Cells       | Monocrystalline 7.2 × 1.8 in (182 × 45.5 mm)                                            |
| Module Dimensions | 60.6 × 29.9 × 1.2 in (1540 × 760 × 30 mm)                                               |
| Cell Orientation  | 128 cells (4 × 16 × 2)                                                                  |
| Weight            | 26.9 lb (12.2 kg)                                                                       |
| Glass             | 3.2 mm (0.13 in), High Transmission, AR Coated Tempered Glass                           |
| Backsheet         | Black                                                                                   |
| Connector         | Solar Connectors                                                                        |
| Frame             | Anodized Aluminum Alloy                                                                 |
| Junction Box      | IP 68 rated                                                                             |
| Cables            | Photovoltaic Technology Cable 4.0 mm <sup>2</sup> (#12 gauge), 47.2 in (1200 mm) Length |

## TEMPERATURE RATINGS

|                                             |            |
|---------------------------------------------|------------|
| Nominal Module Operating Temperature (NMOT) | 45°C ± 2°C |
| Temperature Coefficient of PMAX             | -0.39%/°C  |
| Temperature Coefficient of VOC              | -0.29%/°C  |
| Temperature Coefficient of ISC              | 0.05%/°C   |

## CURVE CHARACTERISTICS

