

MS-M160

160W Monocrystalline Photovoltaic Module | 12V System

MS-M160 is a high-efficiency monocrystalline photovoltaic module designed for 12V battery charging applications and medium-scale off-grid systems. Manufactured with Grade A monocrystalline silicon cells and advanced encapsulation technology, the MS-M160 delivers stable performance under a wide range of environmental conditions.

With dimensions of 1040 × 760 × 30 mm and a robust aluminum frame, this 160W module provides an excellent balance between power output and module size. Its 36-cell monocrystalline configuration makes it fully compatible with 12V systems, MPPT charge controllers, and series-connected arrays for off-grid residential, mobile and small commercial installations.



KEY FEATURES

Maximum Power

160 W

Cell Type

Monocrystalline

System Voltage

12 V

Junction Box

IP67

Warranty

5 years product / 25 years power

PRODUCT FEATURES

- High-efficiency Grade A monocrystalline silicon cells
- Excellent low-light performance and weak-light response
- Anti-reflective tempered glass with high light transmission
- Anodized aluminum frame for corrosion resistance
- IP67-rated junction box with bypass diodes
- Robust EVA encapsulation for long-term durability
- Maximum system voltage up to 1000 V DC
- Pre-drilled mounting holes for easy installation

APPLICATIONS

- Battery charging for 12V and 24V systems
- RVs, motorhomes, caravans and boats
- Off-grid rural and remote installations
- Residential rooftop solar lighting systems
- Security cameras and CCTV systems
- Water pumping and irrigation systems
- Telemetry, GPS trackers and IoT devices
- Educational and DIY solar projects

ELECTRICAL CHARACTERISTICS (STC)

Parameter	Symbol	Value	Unit
Maximum Power	<i>P_{max}</i>	160	W
Maximum Power Voltage	<i>V_{mp}</i>	18.0	V
Maximum Power Current	<i>I_{mp}</i>	8.89	A
Open Circuit Voltage	<i>V_{oc}</i>	21.6	V
Short Circuit Current	<i>I_{sc}</i>	9.47	A
Power Tolerance	—	± 3	%
Maximum Fuse Current	—	15	A
Maximum System Voltage	<i>V_{max}</i>	1000	V DC

