



Worldwide Energy and Manufacturing USA Co., Limited

AS-5M12

Amerisolar's photovoltaic modules are designed for large electrical power requirements. With a 30-year warranty, AS-5M12 offers higher-powered, more reliable performance for both on-grid and off-grid solar projects.

Key Features

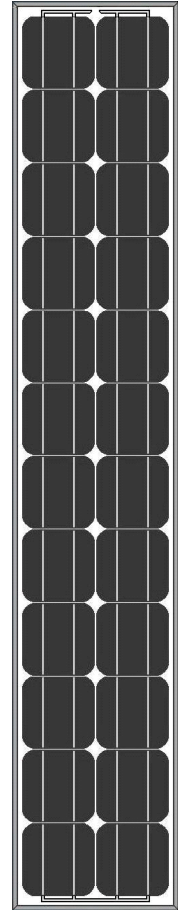
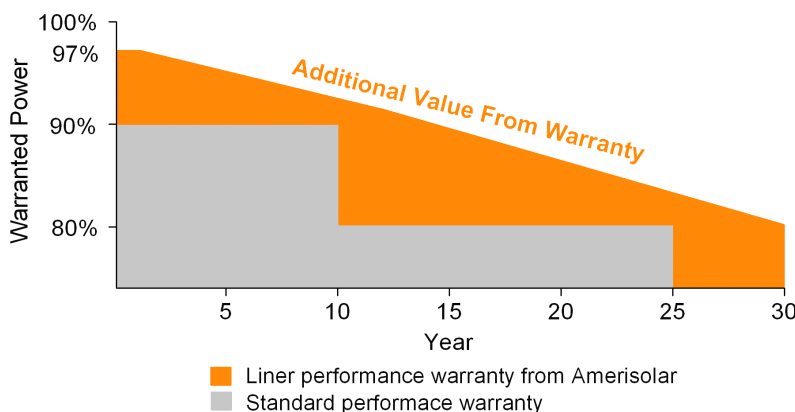
- High module conversion efficiency up to 15.28% through superior manufacturing technology.
- Low degradation and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa.
- Positive power tolerance of 0 ~ +3 %.
- High ammonia and salt mist resistance.

Quality Certificates

- IEC61215, IEC61730, IEC62716, IEC61701, UL1703, CE, MCS, CEC, Israel Electric, Kemco
- ISO9001:2008: Quality management system
- ISO14001:2004: Environmental management system
- OHSAS18001:2007: Occupational health and safety management system

Special Warranties

- 12 year limited product warranty.
- Limited power warranty: 12 years 91.2% of the nominal power output, 30 years 80.6% of the nominal power output.



Passionately committed to delivering innovative energy solution

Electrical Characteristics

Electrical parameters at STC			
Nominal Power (P_{max})	60W	65W	70W
Open Circuit Voltage (V_{oc})	14.8V	15.0V	15.2V
Short Circuit Current (I_{sc})	5.36A	5.63A	5.90A
Voltage at Nominal Power (V_{mp})	12.0V	12.2V	12.4V
Current at Nominal Power (I_{mp})	5.00A	5.33A	5.65A
Module Efficiency (%)	13.09	14.19	15.28

STC: Irradiance 1000W/m², Cell temperature 25°C, AM1.5

Electrical parameters at NOCT			
Nominal Power (P_{max})	44W	48W	51W
Open Circuit Voltage (V_{oc})	13.6V	13.8V	14.0V
Short Circuit Current (I_{sc})	4.34A	4.56A	4.78A
Voltage at Nominal Power (V_{mp})	10.9V	11.1V	11.3V
Current at Nominal Power (I_{mp})	4.04A	4.33A	4.52A

NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind speed 1 m/s

Mechanical Characteristics

Cell type	Monocrystalline 125x125mm
Number of cells	24(2x12)
Module dimension	1580x290x25mm
Weight	5.4kg
Front cover	3.2mm low-iron tempered glass
Frame	Anodized aluminum alloy
Junction box	IP65
Cable	4mm ² , 900mm
Connector	MC4 or MC4 compatible
Standard packaging	108pcs/pallet
Module quantity per container	1296pcs/20'GP

Temperature Characteristics

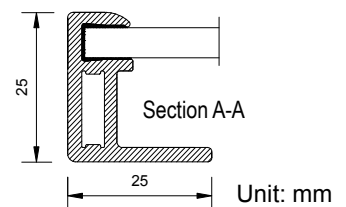
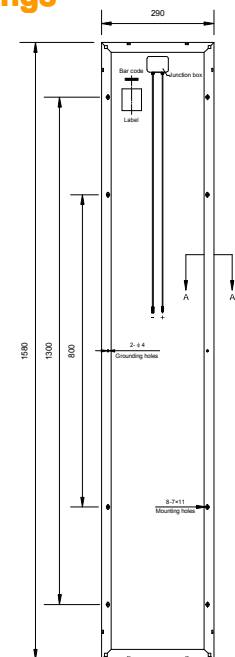
Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of P_{max}	-0.43%/°C
Temperature Coefficients of V_{oc}	-0.33%/°C
Temperature Coefficients of I_{sc}	0.056%/°C

Maximum Ratings

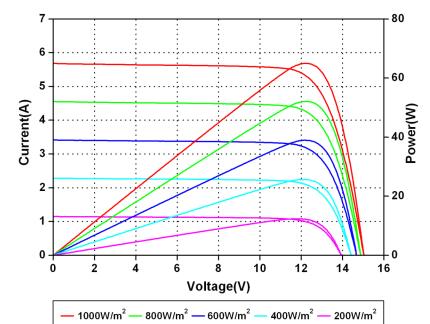
Operating Temperature	-40°C to +85°C
Maximum System Voltage	1000V DC
Maximum Series Fuse Rating	10A

Specifications in this datasheet are subject to change without prior notice.

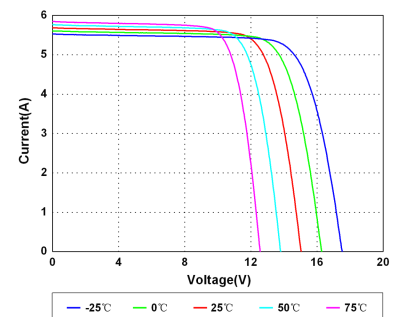
Drawings



I-V Curves



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

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