



AS-6M18

Amerisolar's photovoltaic modules are designed for large electrical power requirements. With a 30-year warranty, AS-6M18 offers higher-powered, more reliable performance for both on-grid and off-grid solar projects.

Key Features

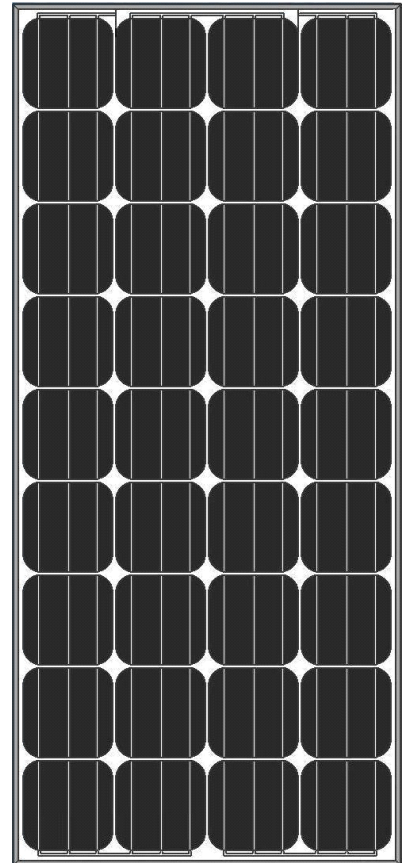
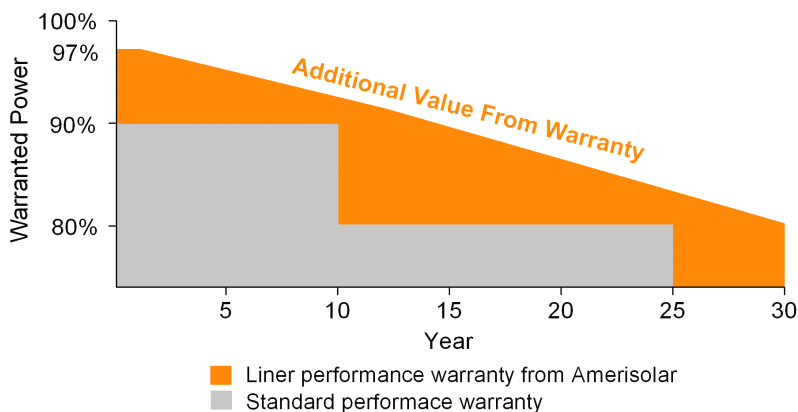
- High module conversion efficiency up to 16.22% through superior manufacturing technology.
- Low degradation and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa.
- Positive power tolerance of 0 ~ +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.



Electrical Characteristics

Electrical parameters at STC						
Nominal Power (P_{max})	135W	140W	145W	150W	155W	160W
Open Circuit Voltage (V_{oc})	21.8V	22.0V	22.2V	22.4V	22.6V	22.8V
Short Circuit Current (I_{sc})	8.30A	8.45A	8.61A	8.75A	8.90A	9.05A
Voltage at Nominal Power (V_{mp})	17.4V	17.6V	17.8V	18.0V	18.2V	18.4V
Current at Nominal Power (I_{mp})	7.76A	7.95A	8.15A	8.33A	8.52A	8.70A
Module Efficiency (%)	13.69	14.20	14.70	15.21	15.72	16.22

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

Electrical parameters at NOCT						
Nominal Power (P_{max})	99W	102W	106W	110W	113W	117W
Open Circuit Voltage (V_{oc})	20.1V	20.2V	20.4V	20.6V	20.8V	21.0V
Short Circuit Current (I_{sc})	6.72A	6.84A	6.97A	7.09A	7.21A	7.33A
Voltage at Nominal Power (V_{mp})	15.8V	16.0V	16.2V	16.4V	16.6V	16.8V
Current at Nominal Power (I_{mp})	6.27A	6.38A	6.55A	6.71A	6.81A	6.97A

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

Mechanical Characteristics

Cell type	Monocrystalline 156x156mm
Number of cells	36(4x9)
Module dimension	1483x665x35mm
Weight	12kg
Front cover	3.2mm low-iron tempered glass
Frame	Anodized aluminum alloy
Junction box	IP65, 2 diodes
Cable	4mm ² , 900mm
Connector	MC4 or MC4 compatible
Standard packaging	28pcs/pallet
Module quantity per container	504pcs/20'GP

Temperature Characteristics

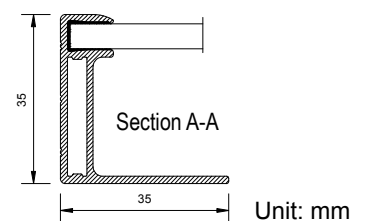
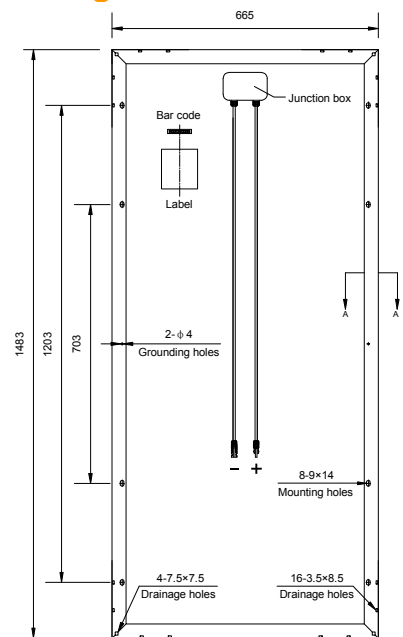
Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of P_{max}	-0.43%/°C
Temperature Coefficients of V_{oc}	-0.33%/°C
Temperature Coefficients of I_{sc}	0.056%/°C

Maximum Ratings

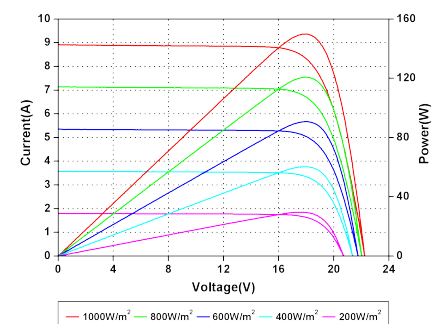
Operating Temperature	-40°C to +85°C
Maximum System Voltage	1000V DC
Maximum Series Fuse Rating	15A

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

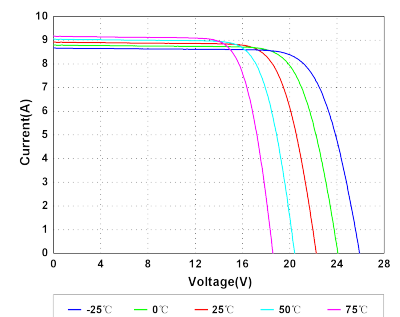
Drawings



I-V Curves



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures