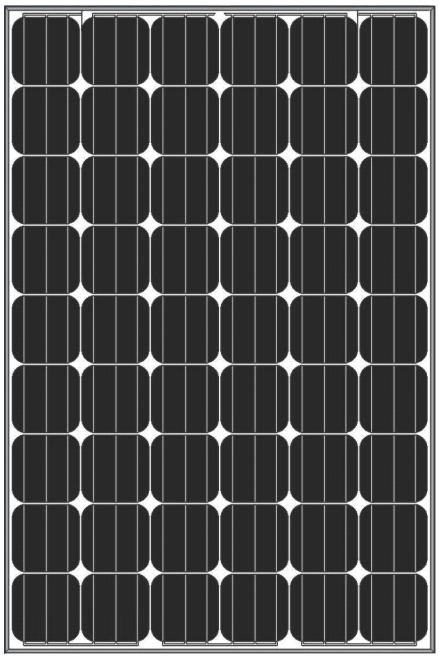
Amerisolar | New Energy New World ®

AS-6M27



MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 16.69% through advanced 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 and snow loads up to 5400Pa.
- Positive power tolerance of 0 ~ +3 %.
- High ammonia and salt mist resistance.
- Potential induced degradation (PID) resistance.

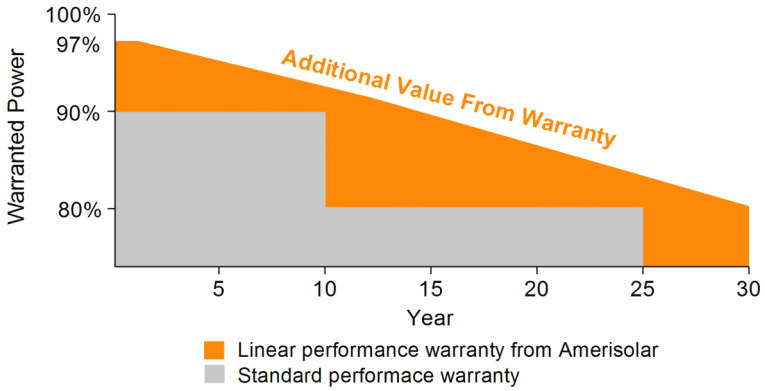
CERTIFICATIONS

- IEC61215, IEC61730, IEC62716, IEC61701, UL1703, CE, ETL(USA), JET(Japan), J-PEC(Japan), MCS(UK), CEC(Australia), FSEC(FL-USA), CSI Eligible(CA-USA), Israel Electric(Israel), Kemco(South Korea), InMetro(Brazil), TSE(Turkey)
- ISO9001:2008: Quality management system
- ISO14001:2004: Environmental management system
- OHSAS18001:2007: Occupational health and safety management system

Passionately committed to delivering innovative energy solution

SPECIAL WARRANTY

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



ELECTRICAL CHARACTERISTICS AT STC

Nominal Power (P_{max})	215W	220W	225W	230W	235W	240W	245W
Open Circuit Voltage (V_{OC})	33.5V	33.6V	33.7V	33.8V	33.9V	34.0V	34.1V
Short Circuit Current (I_{SC})	8.58A	8.68A	8.79A	8.89A	9.00A	9.09A	9.20A
Voltage at Nominal Power (V_{mp})	27.0V	27.1V	27.2V	27.3V	27.4V	27.5V	27.6V
Current at Nominal Power (I_{mp})	7.97A	8.12A	8.28A	8.43A	8.58A	8.73A	8.88A
Module Efficiency (%)	14.64	14.98	15.33	15.67	16.01	16.35	16.69
Operating Temperature	-40°C to +85°C						
Maximum System Voltage	1000V DC						
Fire Resistance Rating	Type 1(UL1703)/Class C(IEC61730)						
Maximum Series Fuse Rating	15A						

STC: Irradiance 1000W/m^2, Cell temperature 25°C, AM1.5

ELECTRICAL CHARACTERISTICS AT NOCT

Nominal Power (P_{max})	158W	162W	166W	169W	173W	177W	180W
Open Circuit Voltage (V_{OC})	30.8V	30.9V	31.0V	31.1V	31.2V	31.3V	31.4V
Short Circuit Current (I_{SC})	6.95A	7.03A	7.12A	7.20A	7.29A	7.36A	7.45A
Voltage at Nominal Power (V_{mp})	24.6V	24.7V	24.8V	24.9V	25.0V	25.1V	25.2V
Current at Nominal Power (I_{mp})	6.43A	6.56A	6.70A	6.79A	6.92A	7.06A	7.15A

NOCT: Irradiance 800W/m^2, Ambient temperature 20°C, Wind Speed 1 m/s

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline 156x156mm (6x6inches)
Number of cells	54 (6x9)
Module dimensions	1480x992x40mm (58.27x39.06x1.57inches)
Weight	17kg(37.5lbs)
Front cover	3.2mm (0.13inches) low-iron tempered glass
Frame	Anodized aluminum alloy
Junction box	IP67, 3 diodes
Cable	4mm^2 (0.006inches^2), 900mm (35.43inches)
Connector	MC4 or MC4 compatible

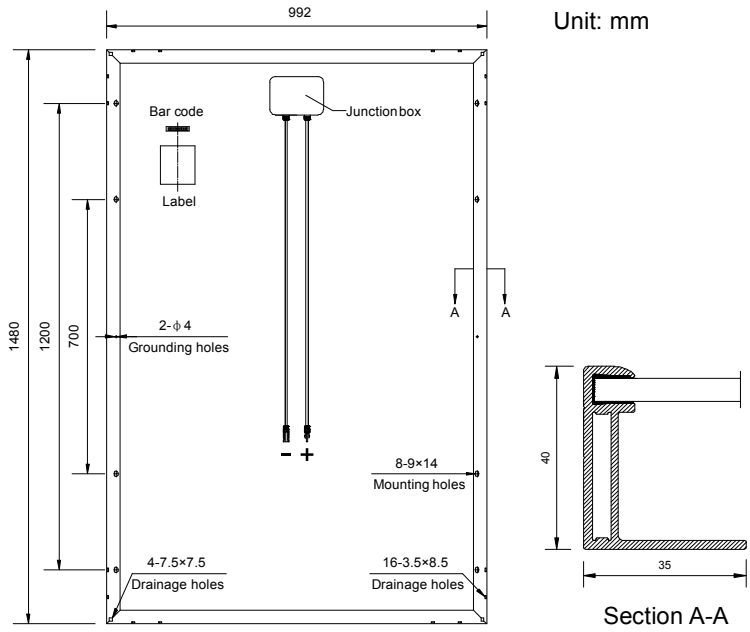
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of P_{max}	-0.41%/°C
Temperature Coefficients of V_{OC}	-0.31%/°C
Temperature Coefficients of I_{SC}	0.05%/°C

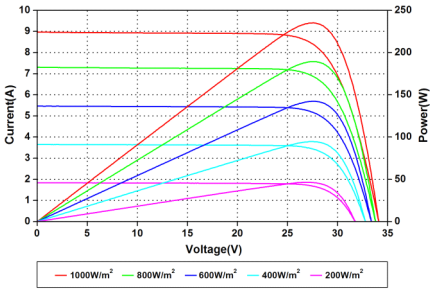
PACKAGING

Standard packaging	26pcs/pallet
Module quantity per 20' container	364pcs
Module quantity per 40' container	780pcs(GP)/840pcs(HQ)

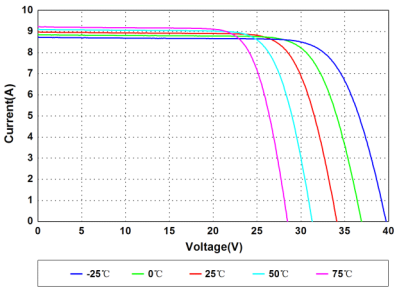
ENGINEERING DRAWINGS



IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

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