



AS-8M120-BT

585W~605W

MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- More power gain up to 30% by utilizing the ambient light reflected from surrounding surfaces.
- Lower annual power degradation and higher energy yield during the module's lifetime.
- Superior performance under high temperature and low light conditions.
- High load-bearing capacity which can withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- Excellent reliability and durability against extreme environmental conditions (high resistance to salt mist, ammonia, sand, acid and alkali, etc.).
- Potential induced degradation (PID) free.

CERTIFICATIONS

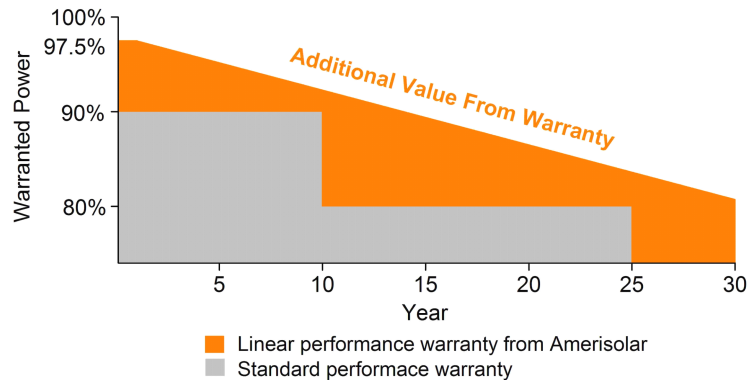


- IEC 61215, IEC 61730, CE
- ISO9001:2015: Quality management system
- ISO14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system

SPECIAL WARRANTY

- 20 years product warranty
- 30 years linear power output warranty

Passionately
committed to
delivering innovative
energy solution



ELECTRICAL CHARACTERISTICS AT STC*

Module Type	AS-8M120-BT-585W	AS-8M120-BT-590W	AS-8M120-BT-595W	AS-8M120-BT-600W	AS-8M120-BT-605W
Maximum Power (P_{max})	585W	590W	595W	600W	605W
Open Circuit Voltage (V_{oc})	41.0V	41.2V	41.4V	41.6V	41.8V
Short Circuit Current (I_{sc})	18.30A	18.35A	18.40A	18.45A	18.50A
Voltage at Maximum Power (V_{mp})	34.1V	34.3V	34.5V	34.7V	34.9V
Current at Maximum Power (I_{mp})	17.16A	17.21A	17.25A	17.30A	17.34A
Module Efficiency (%)	20.67	20.85	21.02	21.20	21.38
Operating Temperature	-40°C to +85°C				
Maximum System Voltage	1000V DC/1500V DC				
Fire Resistance Rating	Class C				
Maximum Series Fuse Rating	35A				

*STC: Irradiance 1000W/m², Cell temperature 25°C, AM1.5; Tolerance of P_{max}: ±3%; Measurement Tolerance: ±3%

ELECTRICAL CHARACTERISTICS AT NOCT**

Module Type	AS-8M120-BT-585W	AS-8M120-BT-590W	AS-8M120-BT-595W	AS-8M120-BT-600W	AS-8M120-BT-605W
Maximum Power (P_{max})	439W	443W	447W	451W	455W
Open Circuit Voltage (V_{oc})	38.6V	38.8V	39.0V	39.2V	39.4V
Short Circuit Current (I_{sc})	14.82A	14.86A	14.90A	14.94A	14.98A
Voltage at Maximum Power (V_{mp})	31.6V	31.8V	32.0V	32.2V	32.4V
Current at Maximum Power (I_{mp})	13.90A	13.94A	13.97A	14.01A	14.05A

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

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: AS-8M120-BT-600W)

Power Gain	P_{max}	V_{oc}	I_{sc}	V_{mp}	I_{mp}
10%	660W	41.6V	20.29A	34.7V	19.03A
15%	690W	41.6V	21.20A	34.7V	19.89A
20%	720W	41.6V	22.12A	34.7V	20.75A
25%	750W	41.6V	23.05A	34.7V	21.62A
30%	780W	41.6V	23.97A	34.7V	22.48A

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline bifacial
Number of cells	120(6x20)
Module dimensions	2172x1303x35mm
Weight	31kg
Front cover	3.2mm tempered glass with AR coating
Back cover	Transparent backsheet
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm ² , Length: Portrait: 300mm; Landscape: 1300mm
Connector	MC4 compatible

TEMPERATURE CHARACTERISTICS

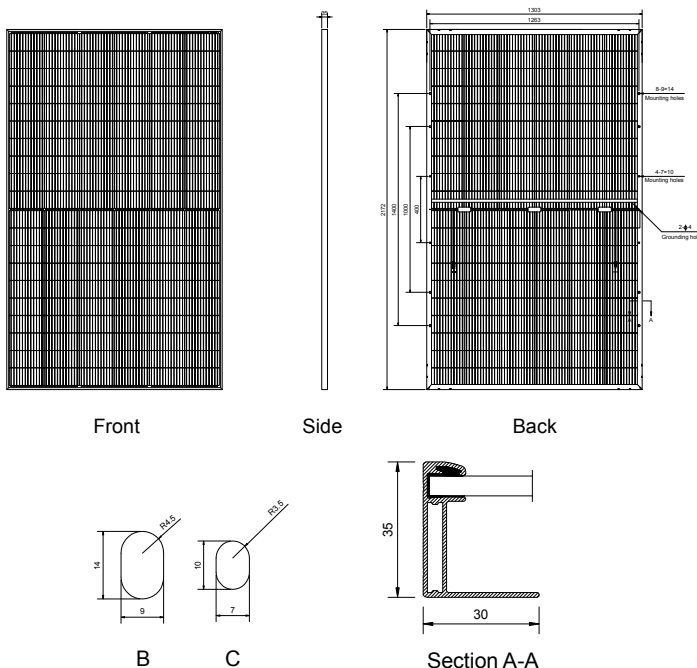
Nominal Operating Cell Temperature (NOCT)	42°C±2°C
Temperature Coefficients of P_{max}	-0.36%/°C
Temperature Coefficients of V_{oc}	-0.28%/°C
Temperature Coefficients of I_{sc}	0.05%/°C

PACKAGING

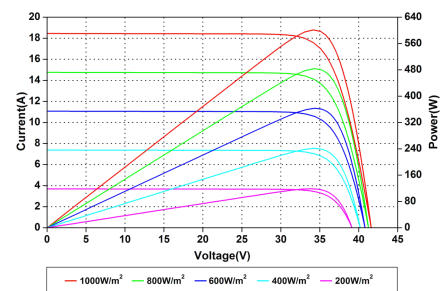
Standard packaging	31pcs/pallet
Module quantity per 20' container	155pcs
Module quantity per 40' container	527pcs(HQ)

ENGINEERING DRAWINGS

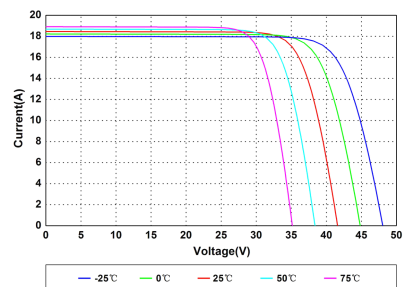
Unit: mm



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.