

AS-7M108-BHC Black 405W~420W

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

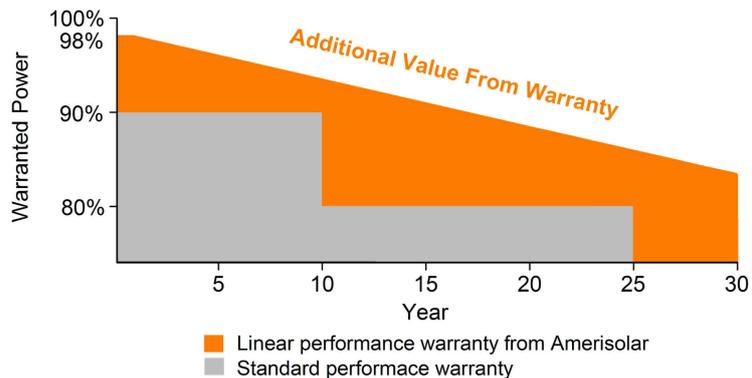


- IEC 61215, IEC 61730, CE
- ISO9001:2015: Quality management system
- ISO14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system

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-7M108-BHC-405W	AS-7M108-BHC-410W	AS-7M108-BHC-415W	AS-7M108-BHC-420W
Maximum Power (P_{max})	405W	410W	415W	420W
Open Circuit Voltage (V_{oc})	37.4V	37.6V	37.8V	38.0V
Short Circuit Current (I_{sc})	13.76A	13.82A	13.88A	13.94A
Voltage at Maximum Power (V_{mp})	31.2V	31.4V	31.6V	31.8V
Current at Maximum Power (I_{mp})	12.99A	13.06A	13.14A	13.21A
Module Efficiency (%)	20.74	21.00	21.25	21.51
Operating Temperature	-40°C to +85°C			
Maximum System Voltage	1500V DC			
Fire Resistance Rating	Class C			
Maximum Series Fuse Rating	30A			

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

ELECTRICAL CHARACTERISTICS AT NOCT**

Module Type	AS-7M108-BHC-405W	AS-7M108-BHC-410W	AS-7M108-BHC-415W	AS-7M108-BHC-420W
Maximum Power (P_{max})	304W	308W	312W	316W
Open Circuit Voltage (V_{oc})	34.4V	34.6V	34.8V	35.0V
Short Circuit Current (I_{sc})	11.15A	11.20A	11.25A	11.30A
Voltage at Maximum Power (V_{mp})	28.4V	28.6V	28.8V	29.0V
Current at Maximum Power (I_{mp})	10.71A	10.77A	10.84A	10.90A

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

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: AS-7M108-BHC-410W)

Power Gain	P_{max}	V_{oc}	I_{sc}	V_{mp}	I_{mp}
10%	451W	37.6V	15.20A	31.4V	14.37A
15%	472W	37.6V	15.91A	31.4V	15.04A
20%	492W	37.6V	16.58A	31.4V	15.67A
25%	513W	37.6V	17.29A	31.4V	16.34A
30%	533W	37.6V	17.96A	31.4V	16.98A

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline bifacial
Number of cells	108 (6x18)
Module dimensions	1722x1134x30mm
Weight	24kg
Front/Back Glass	2mm AR coated tempered glass/2mm tempered glass
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm ² , 300mm; Customized Length
Connector	MC4 compatible

TEMPERATURE CHARACTERISTICS

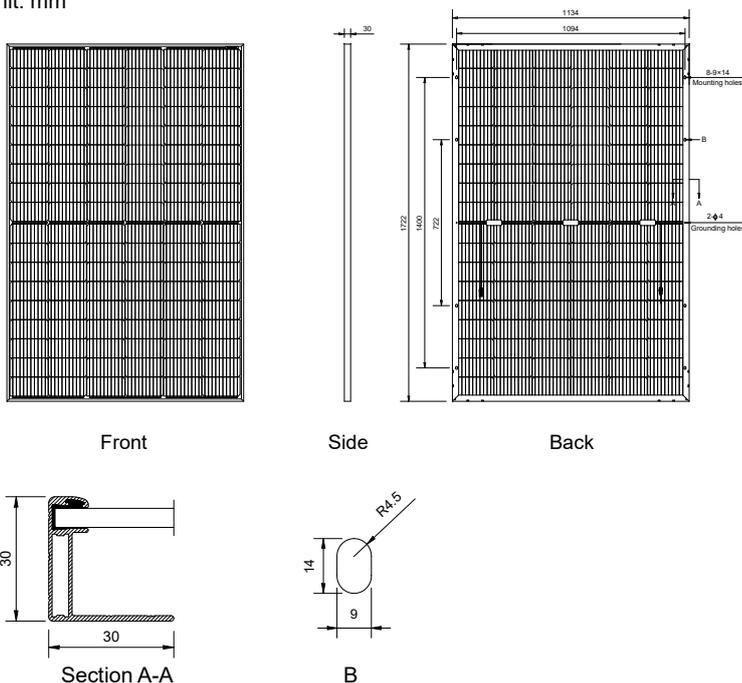
Nominal Operating Cell Temperature (NOCT)	42°C±2°C
Temperature Coefficients of P_{max}	-0.35%/°C
Temperature Coefficients of V_{oc}	-0.28%/°C
Temperature Coefficients of I_{sc}	0.048%/°C

PACKAGING

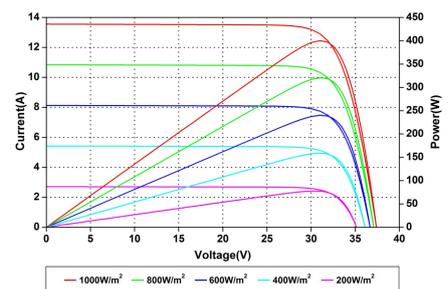
Standard packaging	36pcs/pallet
Module quantity per 20' container	216pcs
Module quantity per 40' container	936pcs(HQ)

ENGINEERING DRAWINGS

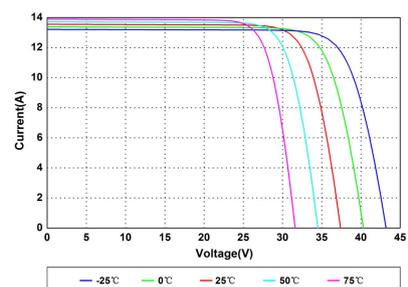
Unit: mm



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.