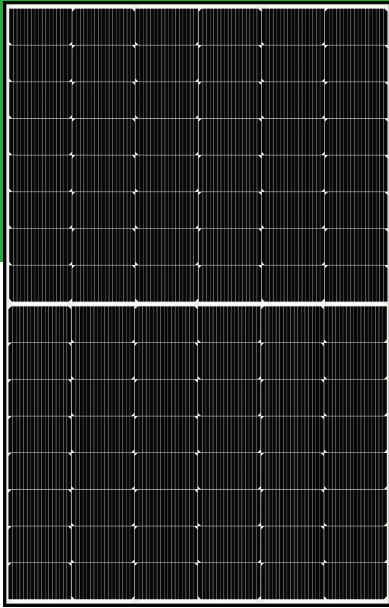




AS-7M96N-BHC G12R Black 440W~455W

MONOCRYSTALLINE MODULE



ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.77% by using innovative N-type cell technology.
- Extremely low LID (light induced degradation) and low annual power degradation ensure higher energy yield during the module's lifetime.
- Low temperature coefficient 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.
- High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).
- Potential induced degradation (PID) resistance.

CERTIFICATIONS

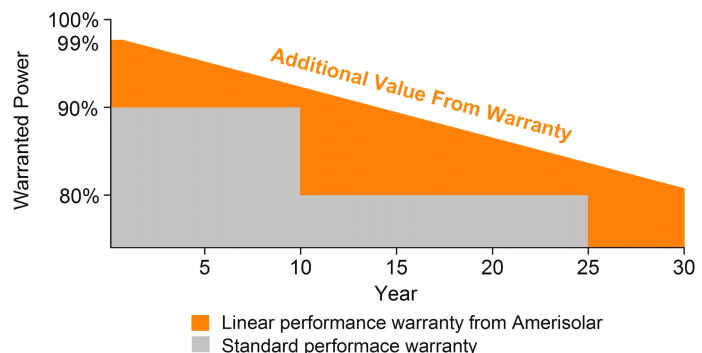


- IEC 61215, IEC 61730, CE
- ISO 9001:2015: Quality management system
- ISO 14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system

SPECIAL WARRANTY

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

Passionately
committed to
delivering innovative
energy solution



ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (P _{max})	440W	445W	450W	455W
Open Circuit Voltage (VOC)	39.5V	39.7V	39.9V	40.1V
Short Circuit Current (ISC)	113.98A	14.05A	14.12A	14.19A
Voltage at Maximum Power (V _{mp})	33.1V	33.3V	33.5V	33.7V
Current at Maximum Power (I _{mp})	13.30A	13.37A	13.44A	13.51A
Module Efficiency (%)	22.02	22.27	22.52	22.77
Operating Temperature	-40°C to +85°C			
Maximum System Voltage	1000V DC/1500V DC			
Fire Resistance Rating	Class C			
Maximum Series Fuse Rating	30A			

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

ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power (P _{max})	330W	334W	338W	342W
Open Circuit Voltage (VOC)	37.1V	37.3V	37.5V	37.7V
Short Circuit Current (ISC)	11.34A	11.39A	11.45A	11.50A
Voltage at Maximum Power (V _{mp})	30.7V	30.9V	31.1V	31.3V
Current at Maximum Power (I _{mp})	10.76A	10.82A	10.88A	10.93A

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

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: AS-7M96N-BHC-450W)

Power Gain	P _{max}	V _{oc}	I _{sc}	V _{mp}	I _{mp}
5%	473W	39.9V	14.83A	33.5V	14.12A
15%	518W	39.9V	16.24A	33.5V	15.46A
25%	563W	39.9V	17.65A	33.5V	16.80A

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline N-type
Number of cells	96(6x16)
Module dimensions	1762x1134x30mm
Weight	24.5kg
Front cover	2mm AR coated tempered glass/2mm tempered glass
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm ² , Portrait: 300mm; length can be customized
Connector	MC4 or MC4 compatible

TEMPERATURE CHARACTERISTICS

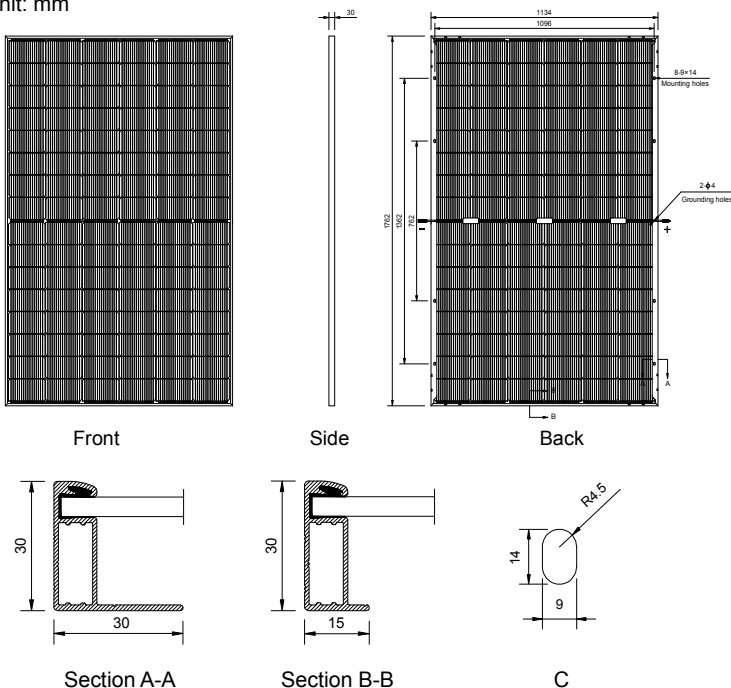
Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of P _{max}	-0.30%/°C
Temperature Coefficients of V _{oc}	-0.25%/°C
Temperature Coefficients of I _{sc}	0.045%/°C

PACKAGING

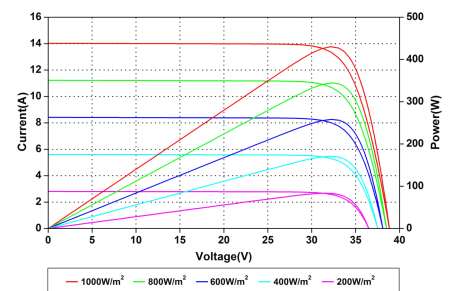
Standard packaging	36pcs/pallet
Module quantity per 20' container	216pcs
Module quantity per 40' container	936pcs(HQ)

ENGINEERING DRAWINGS

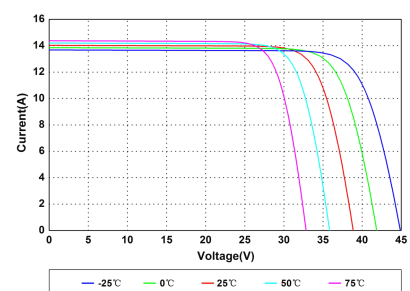
Unit: mm



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.