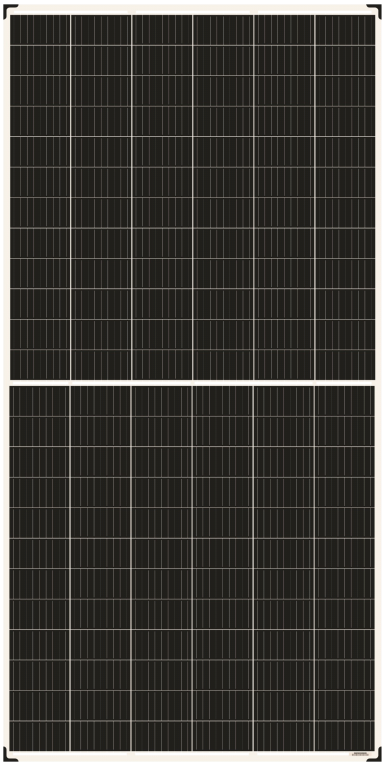
Amerisolar | New Energy New World ®

AS-6M-BHC BIFACIAL HALF-CELL DOUBLE GLASS MODULE



Passionately committed to delivering innovative energy solution

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.
- Positive power tolerance of 0 ~ +3 %.

CERTIFICATIONS

- IEC61215, IEC61730, CE
- ISO9001:2015: Quality management system
- ISO14001:2015: Environmental management system
- OHSAS18001:2007: Occupational health and safety management system

SPECIAL WARRANTY

- 15 years limited product warranty.
- Limited linear power warranty: 30 years 84.45% of the nominal power output.

ELECTRICAL CHARACTERISTICS *

Nominal Power (P_{max})	430W	435W	440W	445W	450W	455W	460W
Open Circuit Voltage (V_{OC})	48.1V	48.3V	48.5V	48.7V	48.9V	49.1V	49.3V
Short Circuit Current (I_{SC})	11.29A	11.37A	11.44A	11.51A	11.59A	11.66A	11.73A
Voltage at Nominal Power (V_{mp})	40.0V	40.2V	40.4V	40.6V	40.8V	41.0V	41.2V
Current at Nominal Power (I_{mp})	10.75A	10.82A	10.89A	10.96A	11.03A	11.10A	11.17A
Module Efficiency (%)	21.13	21.38	21.62	21.87	22.11	22.36	22.60
Operating Temperature	-40°C to +85°C						
Maximum System Voltage	1500V DC						
Fire Resistance Rating	Class C						
Maximum Series Fuse Rating	20A						

*Test condition: Irradiance (1.0+0.2 BiFi) 1000W/m^2, Cell temperature 25°C, AM1.5

ELECTRICAL CHARACTERISTICS AT NOCT**

Nominal Power (P_{max})	324W	328W	332W	336W	340W	344W	348W
Open Circuit Voltage (V_{OC})	44.3V	44.5V	44.7V	44.9V	45.1V	45.3V	45.5V
Short Circuit Current (I_{SC})	9.15A	9.21A	9.27A	9.33A	9.39A	9.45A	9.51A
Voltage at Nominal Power (V_{mp})	36.4V	36.6V	36.8V	37.0V	37.2V	37.4V	37.6V
Current at Nominal Power (I_{mp})	8.91A	8.97A	9.03A	9.09A	9.14A	9.20A	9.26A

**NOCT: Irradiance (1.0+0.2 BiFi) 800W/m^2, Ambient temperature 20°C, Wind Speed 1 m/s

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC
Number of cells	144 (6x24)
Module dimensions	2031x1002x6mm (Junction box is not included)
Weight	29kg
Front Glass	2.5mm Tempered glass with AR coating
Back Glass	2.5mm Tempered glass
Junction box	IP67, 3 diodes
Cable	4mm^2
Connector	MC4 compatible

TEMPERATURE CHARACTERISTICS

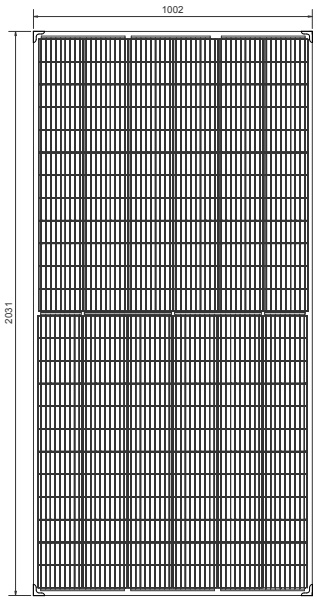
Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of P_{max}	-0.38%/°C
Temperature Coefficients of V_{OC}	-0.30%/°C
Temperature Coefficients of I_{SC}	0.048%/°C

PACKAGING

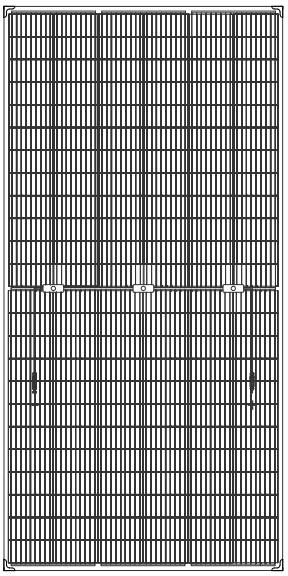
Standard packaging	30pcs/pallet
Module quantity per 20' container	150pcs
Module quantity per 40' container	660pcs

ENGINEERING DRAWINGS

Unit: mm



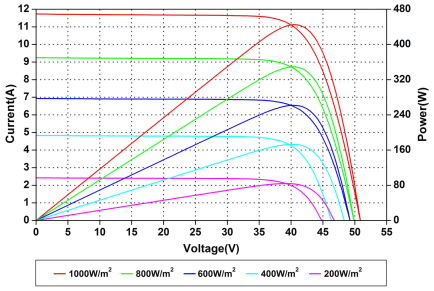
Front



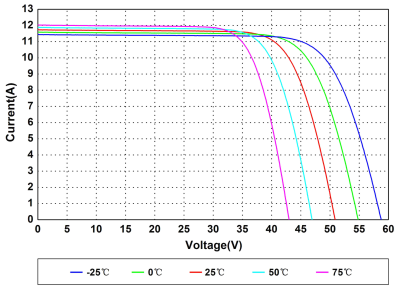
Rear

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

IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures