



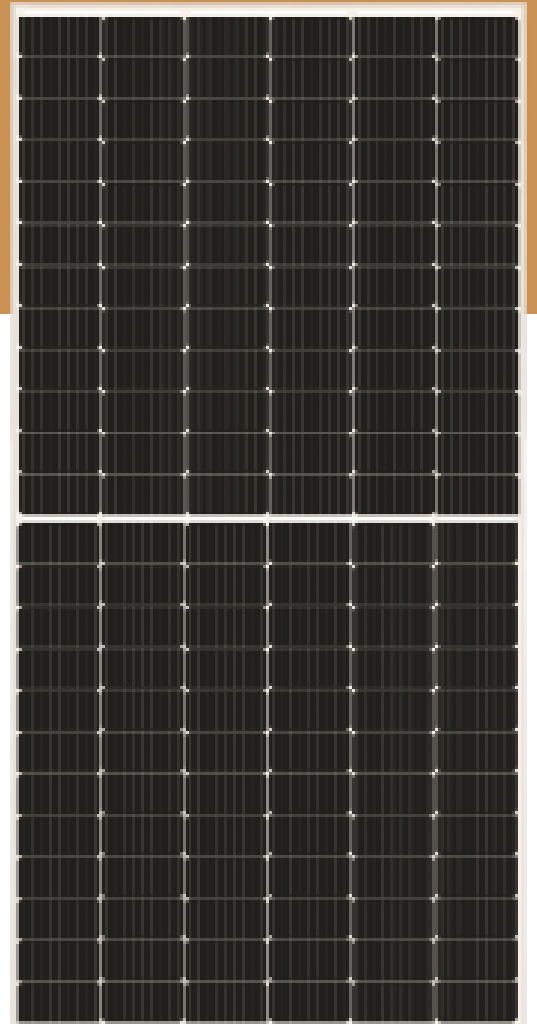
Supplied by



AS-7M144-BHC

530W~550W

MONOCRYSTALLINE MODULE



ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- More power gains 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.

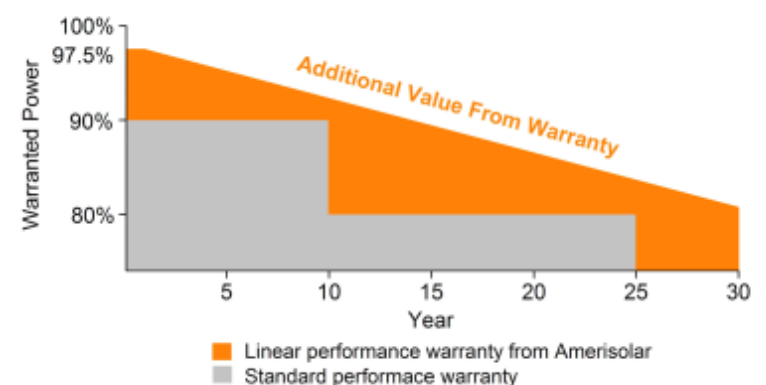
CERTIFICATIONS

- 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



ELECTRICAL CHARACTERISTICS AT STC*

Module Type	AS-7M144-BHC-530W	AS-7M144-BHC-535W	AS-7M144-BHC-540W	AS-7M144-BHC-545W	AS-7M144-BHC-550W
Maximum Power (Pmax)	530	535	540	545	550
Open Circuit Voltage (VOC)	49.2	49.4	49.6	49.8	50.0
Short Circuit Current (ISC)	13.78	13.82	13.86	13.90	13.94
Voltage at Maximum Power (Vmp)	41.0	41.2	41.4	41.6	41.8
Current at Maximum Power (Imp)	12.93	12.99	13.05	13.11	13.16
Module Efficiency (%)	20.51	20.70	20.89	21.09	21.28
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 Pmax: ±3%; Measurement Tolerance: ±3%

ELECTRICAL CHARACTERISTICS AT NOCT**

Maximum Power (Pmax)	395	399	403	407	411
Open Circuit Voltage (VOC)	45.3	45.5	45.7	45.9	46.1
Short Circuit Current (ISC)	11.16	11.19	11.22	11.25	11.28
Voltage at Maximum Power (Vmp)	37.3	37.5	37.7	37.9	38.1
Current at Maximum Power (Imp)	10.59	10.64	10.69	10.74	10.79

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

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: AS-7M144-BHC-540W)

Power Gain	Pmax	VOC	ISC	Vmp	Imp
10%	594	49.6	15.24	41.4	14.35
15%	621	49.6	15.93	41.4	15.00
20%	648	49.6	16.62	41.4	15.66
25%	675	49.6	17.31	41.4	16.31
30%	702	49.6	17.99	41.4	16.96

MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline bifacial
Number of cells	144 (6x24)
Module dimensions	2279x1134x35mm
Weight	29kg
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

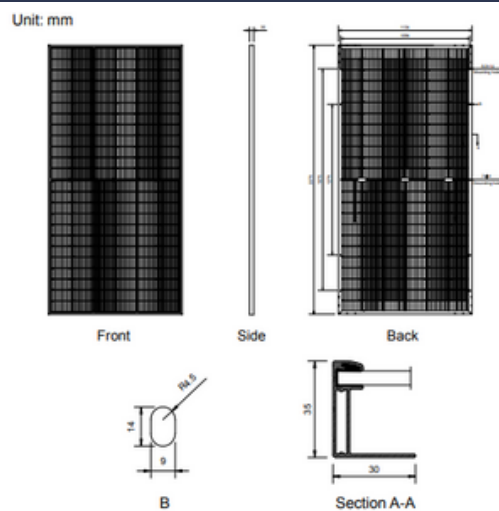
TEMPERATURE COEFFICIENT

Nominal Operating Cell Temperature (NOCT)	42°C±2°C
Temperature Coefficients of Pmax	-0.36%/°C
Temperature Coefficients of VOC	-0.28%/°C
Temperature Coefficients of ISC	0.05%/°C

PACKAGING

Standard packaging	31pcs/pallet
Module quantity per 20' container	155pcs
Module quantity per 40' container	620pcs(HQ)

ENGINEERING DRAWINGS



IV CURVES

