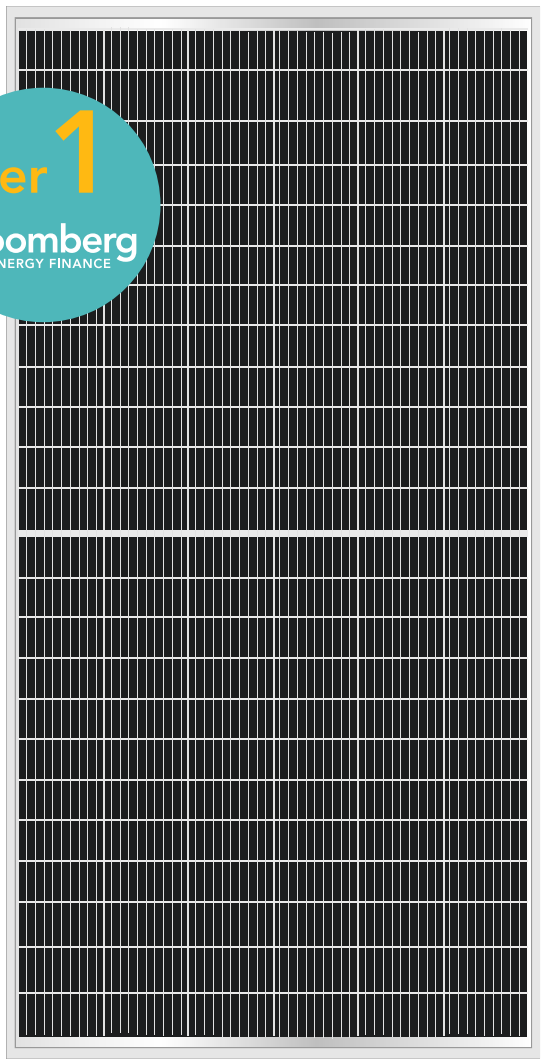
ABiSOLAR

AB450-72MHC-BF

430W
435W
440W
445W
450W

144 (6×24) 166×83mm 9BB

Monocrystalline PV modules



Half cell design
The HC design 120-cell brings lower cell connection loss and lower thermal coefficients at high operation temperatures

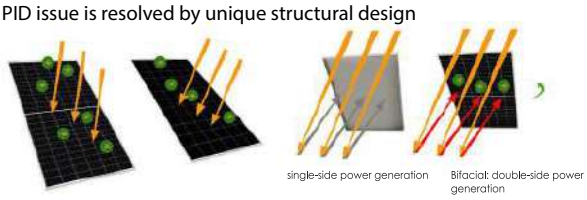
High Efficiency
Leading PERC technology achieves higher module efficiency up to frontside 19.03% and 22.84% with backside 20% power boost

Excellent Low-light Performance
Advanced solar cell surface texturing technology allows for excellent performance in low-light environments.

High Reliability
0.5% annual degradation. Strict in-house testing in Lab which CNAS & VDE certified to ensure the 30year linear power warranty

Highly Strengthened Design
Framed Double Glass design. Certified to withstand: 5400Pa snow load and 2400Pa wind load

PID Resistant
PID issue is resolved by unique structural design



Up to 20% power gain depending on albedo and PV system design

WHY ABI-SOLAR?

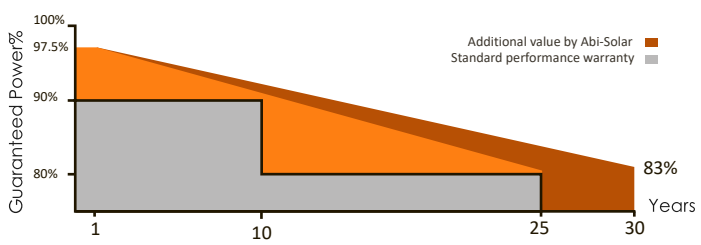
- Manufacturing and assembly of PV modules are performed only on East Asian enterprises from **Bloomberg Tier 1** list.
- PV modules are tested and demonstrate high reliability in various climatic conditions and in a wide range of insolation.
- High efficiency and return on investment guaranteed around the world.
- Modules certified by global testing facilities: IEC61215, IEC61730, CE, ROHS, TÜV.
- Manufacturing with international quality standarts and environment management system: ISO9001 and ISO14001.
- Maximum power and performance at minimal price ensure fast return of investments.
- Compatability with both on-grid and off-grid PV systems garateed.

12 YEAR
Manufacturing Warranty

12 YEAR WARRANTY
90% Power Output

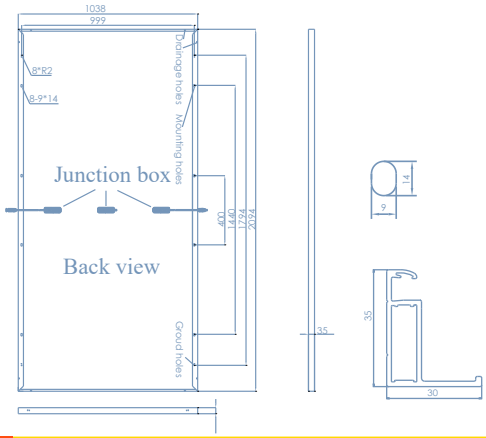
30 YEAR WARRANTY
83% Power Output

INDUSTRY-LEADING WARANTY BASED ON NOMINAL POWER



AB450-72MHC

MECHANICAL DRAWINGS



MECHANICAL SPECIFICATIONS

Cell type	Mono crystalline
Number of cell	144 (2*(6*12)), 166×83 mm
Dimensions (A×B×C)	2094×1038×35mm
Weight	27,8 kg
Front glass	3.2 mm AR coating tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68
Connector	MC4 Compatible
Output cables	length: 1200 mm, 4.0 mm^2
Maximum snow load (IEC 61215)	5400Pa

ELECTRICAL CHARACTERISTICS (STC)

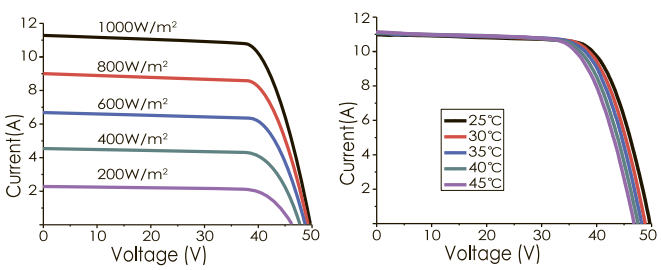
	AB430-72MHC	AB435-72MHC	AB440-72MHC	AB445-72MHC	AB450-72MHC
Maximum Power (Pmax)	430W	435W	440W	445W	450W
Shot Circuit Current (Isc)	11.04A	11.11A	11.17A	11.24A	11.31A
Open Circuit Voltage (Voc)	49.05V	49.25V	49.44V	49.65V	49.85V
Maximum Power Current (Impp)	10.53A	10.60A	10.67A	10.74A	10.81A
Maximum Power Voltage (Vmpp)	40.84V	41.04V	41.24V	41.44V	41.63V
Module Efficiency	19.78%	20.01%	20.24%	20.47%	20.70%
Power Tolerance	(0~+3 W)				
Maximum System Voltage	VDC 1500V				
Maximum Series Fuse	20A				

NOCT

	AB430-72MHC	AB435-72MHC	AB440-72MHC	AB445-72MHC	AB450-72MHC
Maximum Power (Pmax)	320W	323W	327W	330W	334W
Shot Circuit Current (Isc)	8.90A	8.96A	9.05A	9.10A	9.16A
Open Circuit Voltage (Voc)	45.44V	45.60V	45.81V	45.99V	46.19V
Maximum Power Current (Impp)	8.49A	8.54A	8.60A	8.66A	8.71A
Maximum Power Voltage (Vmpp)	37.70V	37.83V	38.03V	38.11V	38.35V

STC irradiance: 1000 W/m^2 module temperature: +25 °C AM=1.5 **NOCT** irradiance: 800 W/m^2 module temperature: +20 °C AM=1.5

I - V Curves



TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45±2 °C
Temperature Coefficient of Pmax	-0,36 %/°C
Temperature Coefficient of Voc	-0,295 %/°C
Temperature Coefficient of Isc	0.039 % /°C
Operating Temperature	-40~+85 °C

PACKING CONFIGURATION

Size of packing	**2130x 1120x 1190 mm**
Container	40'HC
Pieces per Pallet	30
Pallets per Container	22
Pieces per Container	660

* (27+27+6)pieces per stack is the special package which only suits for container transport.

QUALIFICATIONS AND CERTIFICATES

Specifications are subject to change without prior notification