



# ABiSOLAR

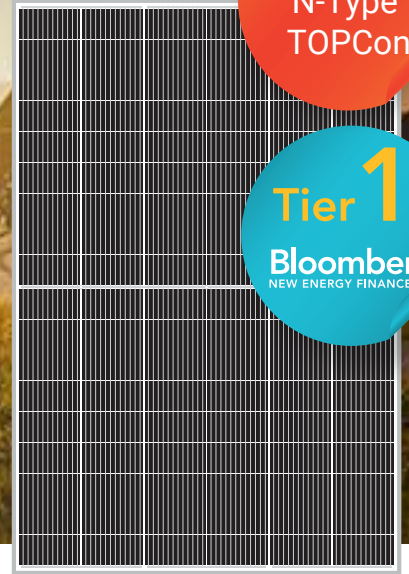
## Get energy from clean sources

# AB54MHC 420-435W

108 (6x18) 1722x1134x30 mm

**16BB**  
N-Type  
TOPCon

**Tier 1**  
Bloomberg  
NEW ENERGY FINANCE



## 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. Maximum power and performance at minimal price ensure fast return of investments. Compatibility with both on-grid and off-grid PV systems guaranteed.



SMBB technology reduce the distance between busbars and finger grid line which is benefit to power increase.

Half-cut cell technology New circuit design, lower internal current, lower Rs loss

Resistance to power attenuation passed TÜV Rheinland system voltage endurance test

Special circuit design with much lower hot spot temperature

Resistance to salt-spray corrosion (IEC61701, certified to TÜV Rheinland test standard)

Fire safety (Class C, certified to TÜV Rheinland and Rheinland test standards)

100% triple EL test enabling remarkable reduction of hidden crack rate of modules

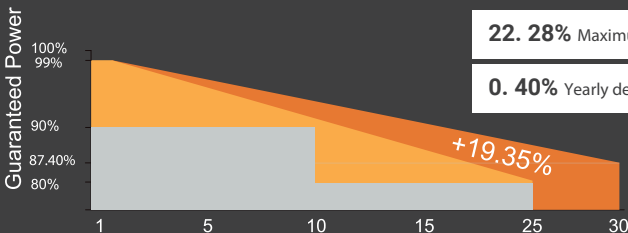
## INDUSTRY-LEADING WARRANTY

**12 year**  
Product warranty

**30 year**  
Output guarantee

**22.28%** Maximum efficiency

**0.40%** Yearly degradation



IEC61215, IEC61730, IEC61701, IEC62716, UL61730

ISO9001, ISO1400, OHSAS 18001



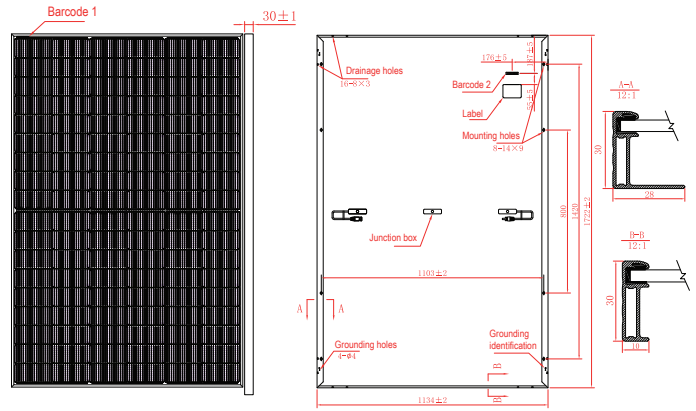
[www.abi-solar.com](http://www.abi-solar.com)



Legend: DG Modules Linear Guarantee (dark orange), Standard (orange), Common Standard (grey)

## MECHANICAL SPECIFICATIONS

Cell type	N-type Monocrystalline 108 (6×18)
Dimensions (A×B×C)	1722×1134×30 mm
Weight	24.5±1.0 kg
Font glass	2.0 mm+2.0mm, High Transmission
Frame	Anodized aluminum alloy
Junction Box	IP68, 3 diodes
Connector	MC4 Compatible
Output cables	4.0 mm <sup>2</sup> , wire length: 300 mm
Container	40HQ
Pieces per Pallet	36
Pallets/container	18
Quantity/container	936



## ELECTRICAL CHARACTERISTICS (STC)

	AB420 54MHC	A425 54MHC	AB430 54MHC	A435 54MHC
Maximum Power (Pmax)	420W	425W	430W	435W
Shot Circuit Current (Isc)	14.05A	14.12A	14.19A	14.26A
Open Circuit Voltage (Voc)	38.10V	37.30V	38.50V	38.70V
Maximum Power Current (Impp)	13.34A	13.41A	13.47A	13.56A
Maximum Power Voltage (Vmpp)	31.50V	31.70V	31.90V	32.10V
Module Efficiency	21.51%	21.76%	22.02%	22.28%
Power Tolerance	(0~+5W)			
Maximum System Voltage	1500 V DC			
Maximum load	5400 Pa			
Maximum Series Fuse	25A			

## NOCT

	AB420 54MHC	AB425 54MHC	AB430 54MHC	AB435 54MHC
Maximum Power (Pmax)	317.20W	320.90W	324.30W	328.60W
Shot Circuit Current (Isc)	11.34A	11.39A	11.45A	11.51A
Open Circuit Voltage (Voc)	36.00V	36.10V	36.30V	36.50V
Maximum Power Current (Impp)	10.67A	10.73A	10.78A	10.84A
Maximum Power Voltage (Vmpp)	29.70V	29.90V	30.10V	30.30V

STC irradiance: 1000 W/m<sup>2</sup> module temperature: +25 AM=1.5

NOCT irradiance: 800 W/m<sup>2</sup> module temperature: +20 AM=1.5

## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	44±2 °C
Temperature coefficient of Pmax	-0.30±0.03%/°C
Temperature coefficient of Voc	-0.25 %/°C
Temperature coefficient of Isc	0.046 %/°C
Operating Temperature	-40~+85 °C

## TEMPERATURE CHARACTERISTICS

