

## Excellent Manufacturing

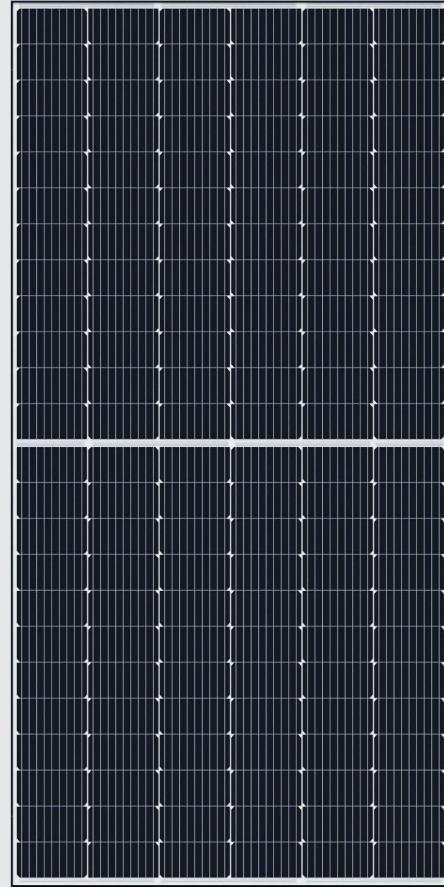
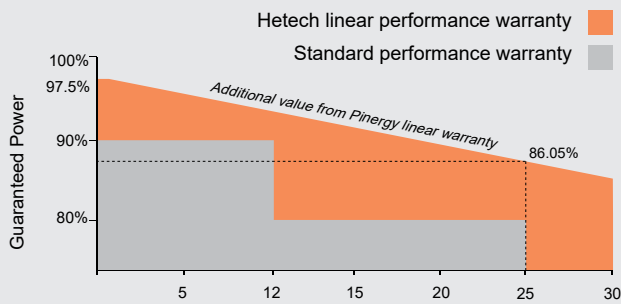
**9 BB**

MONO CRYSTALLINE MODULE

# HET-450M72AH (166MM HALF CELL)

## Linear Performance Warranty

12 Years Product Warranty · 25 Years Linear Power Warranty



## Feature



### Enhanced Performance Warranty

Hetech Solar has an enhanced performance warranty. After 25 years, Hetech Solar is guaranteed to perform at minimum 89.6% of initial performance.



### Enhanced Product warranty

Hetech has extended the warranty of it to 25 years, which is among the top of industry standards.



### Better Performance on a Sunny Day

Hetech Solar now performs better on sunny days, thanks to its improved temperature coefficient.



### Roof Aesthetics

Hetech Solar has been designed with aesthetics in mind using thinner wires that appear all black at a distance. The Hetech Solar can increase the aesthetic value of your home with a more modern design.

# HET-450M72AH

## General Data

Cell Properties(Material / Type)	Monocrystalline
Solar Cell	166mmx83mm
Cell Configuration	144 Cells (6 x 24)
Number of Busbars	9
Module Dimensions (L x W x H)	2,108*1,048*35mm
Weight	24 kg
Glass(Material)	Tempered Glass with AR Coating
Backsheet(Color)	White
Frame(Material)	Anodized Aluminium
Junction Box(Protection Degree)	IP 68
Cables(Length)	4.0 mm <sup>2</sup> positive pole: 250 mm negative pole: 300 mm
Connector(Type)	MC4

## Electrical Properties

Model		HET-450M72AH	
		STC	NOCT
Maximum Power (Pmax)	[W]	450	336.3
MPP Voltage (Vmp)	[V]	41.4	38.28
MPP Current (Imp)	[A]	10.87	8.79
Open Circuit Voltage(Voc)	[V]	50.0	48.5
Short Circuit Current(Isc)	[A]	11.36	9.21
Module Efficiency	[%]	20.71	
Power Tolerance		0~+3W	

\* STC (Standard Test Condition): Irradiance 1000 W/m<sup>2</sup>, Cell temperature 25 °C, AM 1.5

## Operating Conditions

Operating Temperature	[°C]	-40 ~ +90
Maximum System Voltage	[V]	1,000(UL), 1000(IEC)
Maximum Series Fuse Rating	[A]	20
Mechanical Test Load (Front)	[Pa / psf]	5,400 / 113
Mechanical Test Load (Rear)	[Pa / psf]	4,000 / 84

\* Test Load = Design load X Safety Factor (1.5)

## Temperature Characteristics

NMOT*	[°C]	42 ± 3
Pmax	[%/°C]	-0.36
Voc	[%/°C]	-0.27
Isc	[%/°C]	0.03

\* NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m<sup>2</sup>, Ambient temperature 20 °C, Wind speed 1 m/s, Spectrum AM 1.5

## Certifications and Warranty

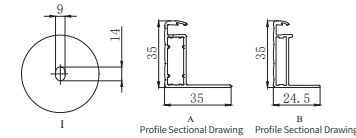
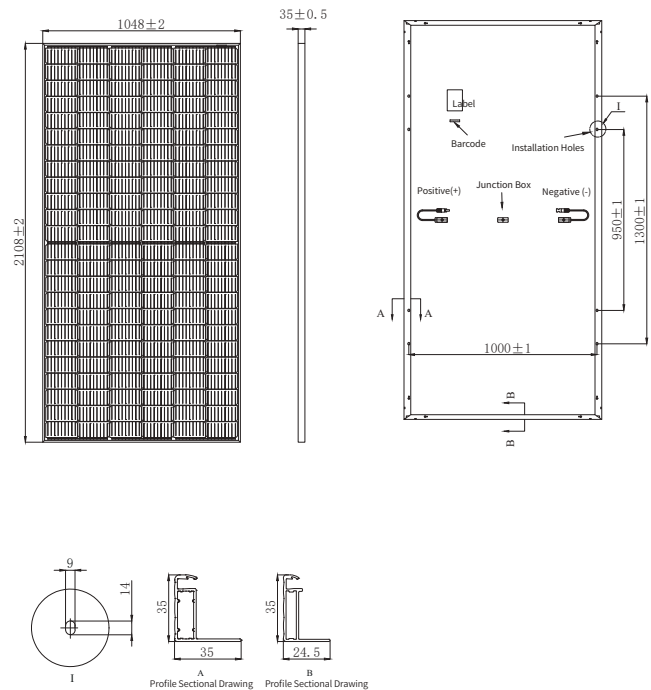
Certifications	IEC 61215-1/-1-1/2:2016, IEC 61730-1/2:2016
	ISO 9001, ISO 14001, ISO 50001
	PV CYCLE
Salt Mist Corrosion Test	IEC 61701 : 2012 Severity 6
Ammonia Corrosion Test	IEC 62716 : 2013
Module Fire Performance	Type 1 (UL 1703)
Fire Rating	Class C (UL 790, ULC/ORD C 1703)
Solar Module Product Warranty	25 Years
Solar Module Output Warranty	Linear Warranty*

\* 1) First year : 98% 2) After 1st year : 0.35% annual degradation 3) 89.6% for 25years

## Packaging Configuration

Number of Modules per Pallet	[EA]	31
Number of Modules per 40ft HQ	[EA]	726
Packaging Box Dimension(L x W x H)	[mm]	2,130 x 1,150 x 1,221
Packaging Box Gross Weight	[kg]	764

## Dimensions (mm)



## I-V Curves

