

# Golden Shark Series

## JHM4/72H



JingHua Energy High Efficiency Monocrystalline Half-cut Cell Solar Module

No. of cells **144 CELL** Power Output Range **440-465W**

Maximum System Voltage **1500V** Maximum Efficiency **21.05%**



### High Output Power

The use of high quality cell and half-cell PERC technology enables modules up to 465W



### High Reliability

Products through a variety of harsh environmental testing



### Lower Temperature Coefficients

Enhance power generation



### Reduce Shadow Loss

Effectively reduces the effect of shadow on the module surface



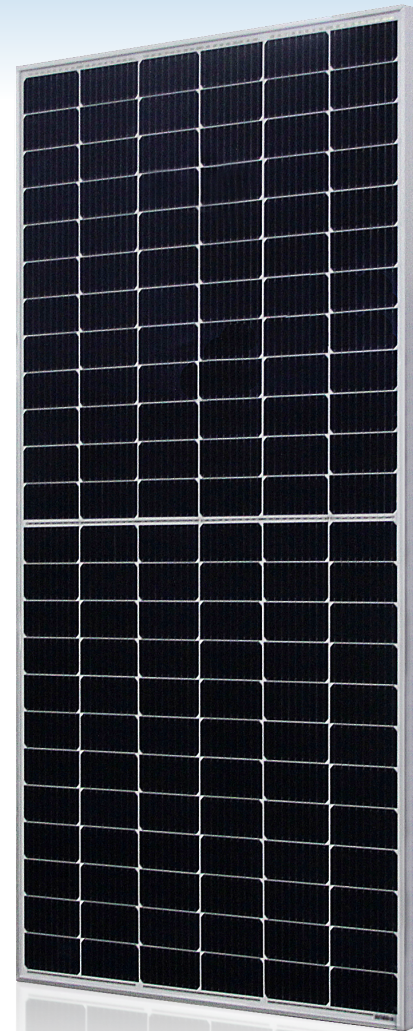
### Better Micro Crack Resistance

Minimize the impact by micro crack by limiting cell damage and potentially extending area

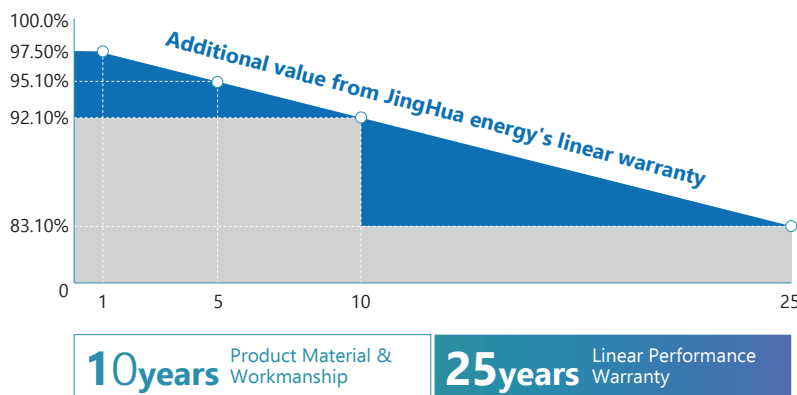


### Excellent Anti-PID Performance

2 times of industry standard Anti-PID test by TUV ( 85°C/85%RH , 192h )



### LINEAR PERFORMANCE WARRANTY



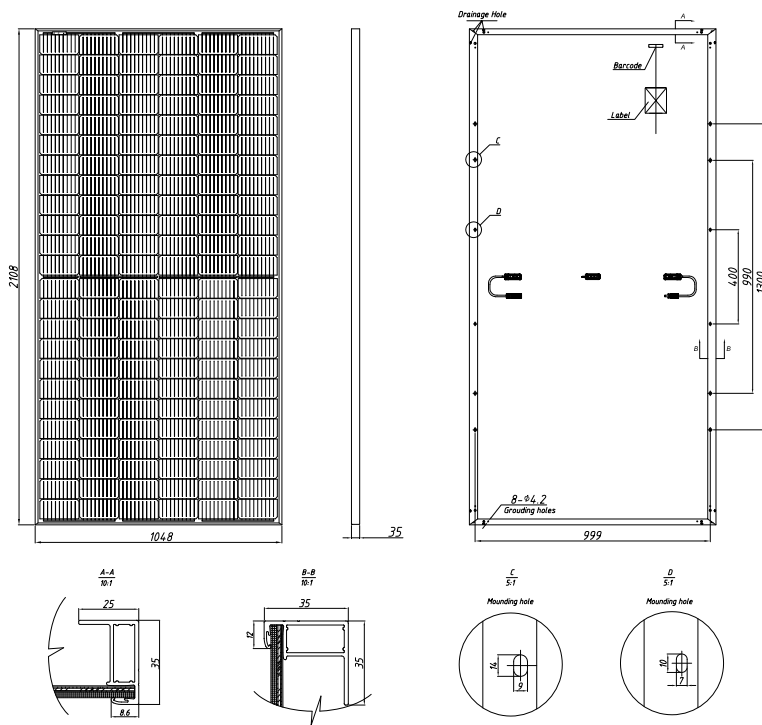
### Comprehensive Products And System Certificates



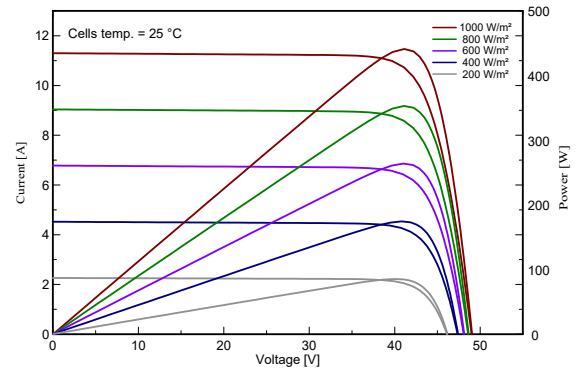
Swiss Re

IEC61215/61730:2016  
 IEC62804(PID free)  
 IEC62716(Ammonia)  
 IEC61701(Salt fog)  
 ISO9001/14001/45001

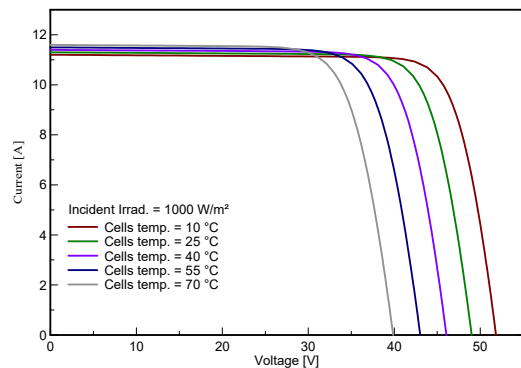
## Module Dimension [ mm ]



## I-V Curve at Different Irradance (440W)



## I-V Curve at Different Working Temperature (440W)



## ELECTRICAL DATA

Module Type	JHM4/72H440		JHM4/72H445		JHM4/72H450		JHM4/72H455		JHM4/72H460		JHM4/72H465	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Peak Power (Pmax) (W)	440	330	445	334	450	337	455	341	460	345	465	349
Maximum Power Voltage (Vmp) (V)	40.8	38.0	41.1	38.3	41.4	38.6	41.7	38.9	42.0	39.2	42.3	39.5
Maximum Power Current (Imp) (A)	10.78	8.67	10.83	8.71	10.87	8.74	10.91	8.78	10.95	8.80	10.99	8.84
Open-circuit Voltage (Voc) (V)	48.9	46.3	49.2	46.6	49.5	46.9	49.7	47.1	49.9	47.4	50.1	47.7
Short-circuit Current (Isc) (A)	11.30	9.13	11.36	9.18	11.42	9.23	11.48	9.28	11.53	9.33	11.58	9.38
Module Efficiency	19.92%		20.14%		20.37%		20.60%		20.82%		21.05%	
Operating Temperature	-40°C~+85°C											
Maximum System Voltage	1500V											
Maximum Series Fuse Rating	20A											
Protection Class	Class II											
Power tolerance	0~+5W											

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

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

## MECHANICAL DATA

Cell Type	Mono-Crystalline
Cell Arrangement	144pcs (2×(6×12))
Dimension (L×W×H)	2108×1048×35mm
Weight	24.5kg
Front Cover	3.2mm Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass Diodes
Cable	4mm <sup>2</sup> /300mm
Connector	Staubli EVO2 or Compatible
Snow/Wind Load	5400Pa/2400Pa

\*JingHua reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

\*Power measurement tolerance: ±3%

## TEMPERATURE CHARACTERISTICS

Temperature coefficient of Pmax	-0.38%
Temperature coefficient of Voc	-0.30%
Temperature coefficient of Isc	0.06%
NMOT	44±2°C

## PACKING MANNER

Packing Type	40HQ
Piece/Pallet	31
Pallet/Container	22
Piece/Container	682