

# Black Shark Series



## JHM4/72BH

JingHua Energy High Efficiency Monocrystalline Half-cut Cell Solar Module

No. of cells **144 CELL** Power Output Range **425-445W**

Maximum System Voltage **1500V** Maximum Efficiency **20.14%**



### High Output Power

The use of high quality cell and half-cell PERC technology enables modules up to 445W



### High Reliability

Products through a variety of harsh environmental testing



### The State Of The Art Appearance

Full black designed for a better aesthetic appearance and building integration



### 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

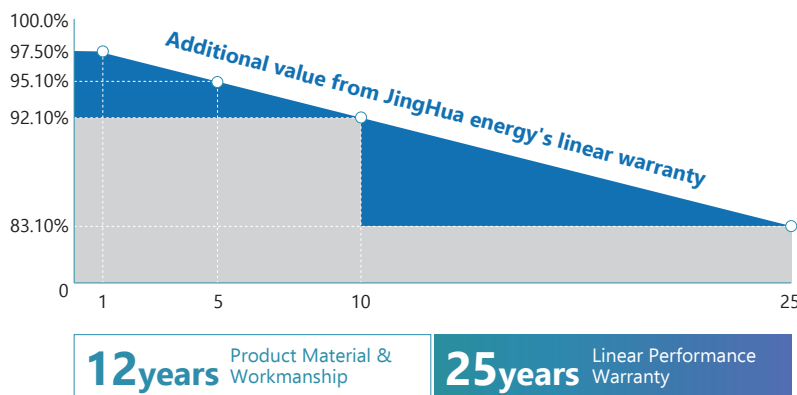


### Excellent Anti-PID Performance

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



### LINEAR PERFORMANCE WARRANTY

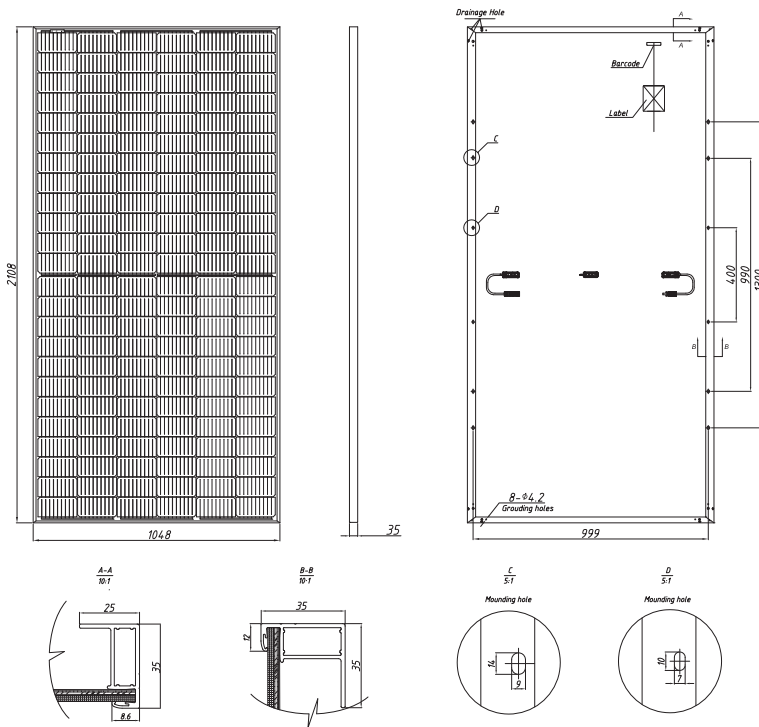


### Comprehensive Products And System Certificates

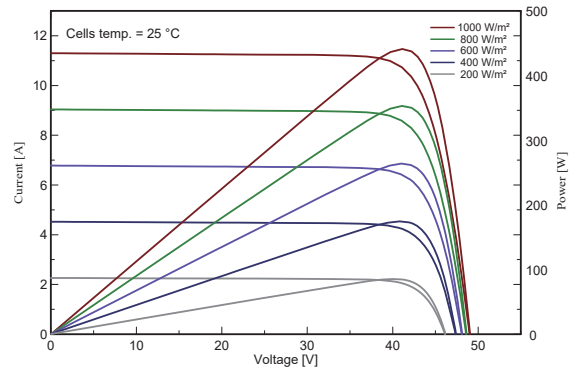


IEC61215/61730:2016  
IEC62804(PID free)  
IEC62716(Ammonia)  
IEC61701(Salt fog)  
ISO9001/14001/45001

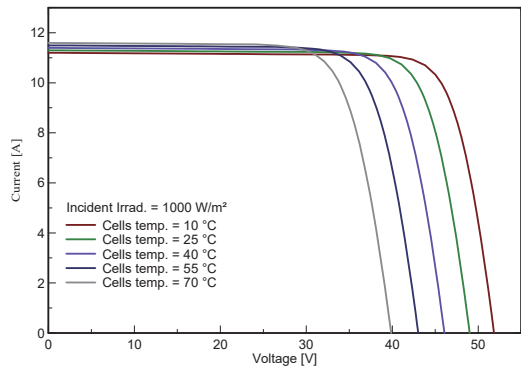
Module Dimension [ mm ]



I-V Curve at Different Irradance (430W)



I-V Curve at Different Working Temperature (430W)



ELECTRICAL DATA

Module Type	JHM4/72BH425		JHM4/72BH430		JHM4/72BH435		JHM4/72BH440		JHM4/72BH445	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Peak Power (Pmax) (W)	425	319	430	322	435	326	440	330	445	334
Maximum Power Voltage (Vmp) (V)	39.9	37.2	40.2	37.5	40.5	37.7	40.8	38.0	41.1	38.3
Maximum Power Current (Imp) (A)	10.65	8.57	10.70	8.60	10.74	8.64	10.78	8.67	10.83	8.71
Open-circuit Voltage (Voc) (V)	48.2	45.7	48.4	45.8	48.7	46.1	48.9	46.3	49.2	46.6
Short-circuit Current (Isc) (A)	11.12	8.99	11.18	9.04	11.24	9.08	11.30	9.13	11.36	9.18
Module Efficiency	19.24%		19.46%		19.63%		19.92%		20.14%	
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

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

\*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%

Version 2020.09 © Jiangsu JingHua new energy operation management Co., Ltd All Rights Reserved.