

# Black Shark Series

## JHM3/60BH



JingHua Energy High Efficiency Monocrystalline Half-cut Cell Solar Module

No. of cells  
**120 CELL**

Power Output Range  
**315-335W**

Maximum System Voltage  
**1500V**

Maximum Efficiency  
**19.85%**



### High Output Power

The use of high quality cell and half-cell PERC technology enables modules up to 335W



### 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

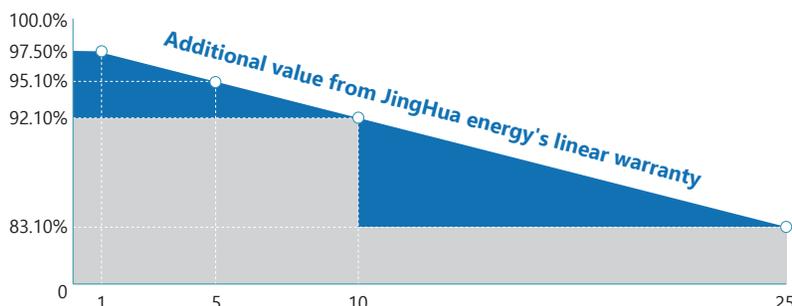


### Excellent Anti-PID Performance

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



### LINEAR PERFORMANCE WARRANTY



**12years** Product Material & Workmanship

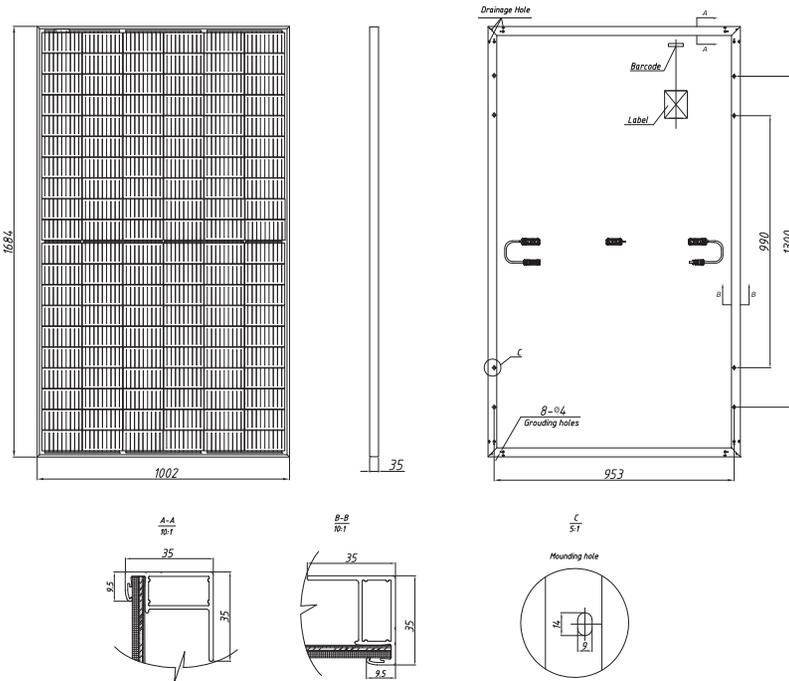
**25years** Linear Performance Warranty

### Comprehensive Products and System Certificates

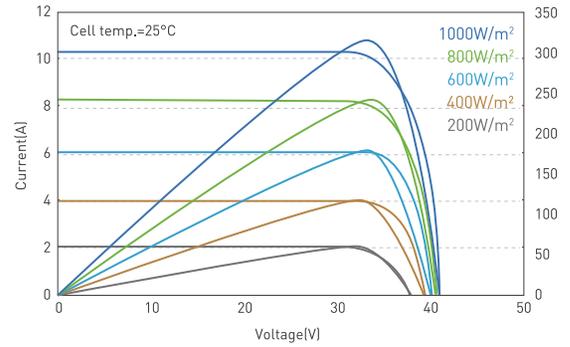


IEC61215/61730:2016  
IEC62804(PID free)  
IEC62716(Ammonia)  
IEC61701(Salt fog)  
ISO9001/14001/45001

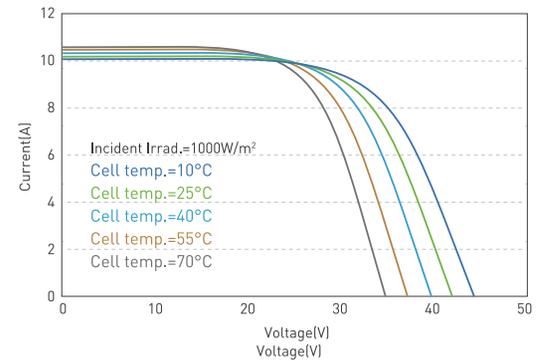
Module Dimension [ mm ]



I-V/P-V Curve at Different Irradance (335W)



I-V Curve at Different Working Temperature (335W)



ELECTRICAL DATA

Module Type	JHM3/60BH315		JHM3/60BH320		JHM3/60BH325		JHM3/60BH330		JHM3/60BH335	
	STC	NMOT								
Peak Power (Pmax) (W)	315	236	320	240	325	244	330	247	335	251
Maximum Power Voltage (Vmp) (V)	33.2	30.9	33.4	31.1	33.6	31.3	33.8	31.5	34.0	31.7
Maximum Power Current (Imp) (A)	9.49	7.63	10.15	7.71	9.67	7.78	9.76	7.85	9.85	7.93
Open-circuit Voltage (Voc) (V)	40.7	38.6	40.9	38.7	41.1	38.9	41.3	39.1	41.5	39.3
Short-circuit Current (Isc) (A)	10.04	8.11	10.15	8.20	10.20	8.24	10.31	8.33	10.36	8.37
Module Efficiency	18.67%		18.96%		19.26%		19.56%		19.85%	
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	120pcs (2×(6×10))
Dimension (L×W×H)	1684×1002×35mm
Weight	19.2kg
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	26
Piece/Container	806

\*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%

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