## BlueShark Series JHM4/72GD

| JingHua Energy High Efficiency Monocrystalline |  |
| :--- | :--- |
| Double Glass M odule Half-cut Cell Solar Module |  |
| No. of cells | Power Output Range |
| 144 CELL | $440-465 W$ |
| Maximun System Voltage | Maximum Efficiency |
| 1500V | $\mathbf{2 1 . 0 5 \%}$ |

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

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 ( $85^{\circ} \mathrm{C} / 85 \% \mathrm{RH}$, 192h )

LINEAR PERFORMANCE WARRANTY


## dinshark



Comprehensive Products And System Certificates

## Module Dimension[ mm ]



I-V Curve at Different Working Temperature (450W)

ELECTRICAL DATA

| Module Type |  | JHM4/72GD440 | JHM4/72GD445 | JHM4/72GD450 | JHM4/72GD455 | JHM4/72GD460 | JHM4/72GD465 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | STC NMOT | STC NMOT | STC NMOT | STC NMOT | STC NMOT | STC NMOT |
| Peak Power (Pmax) | (W) | 440330 | 445334 | 450337 | $455 \quad 341$ | 460345 | 465349 |
| Maximum Power Voltage (Vmp) | (V) | $40.8 \quad 38.0$ | $41.1 \quad 38.3$ | $41.4 \quad 38.6$ | $41.7 \quad 38.9$ | $42.0 \quad 39.2$ | $42.3 \quad 39.5$ |
| Maximum Power Current (Imp) | (A) | 10.78 8.67 | $10.83 \quad 8.71$ | $10.87 \quad 8.74$ | 10.91 8.78 | 10.958 .80 | 10.998 .84 |
| Open-circuit Voltage (Voc) | (V) | $48.9 \quad 46.3$ | 49.246 .6 | 49.546 .9 | $49.7 \quad 47.1$ | $49.9 \quad 47.4$ | 50.147 .7 |
| Short-circuit Current (Isc) | (A) | 11.309 .13 | 11.369 .18 | 11.429 .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 |  | $-40^{\circ} \mathrm{C} \sim+85^{\circ} \mathrm{C}$ |  |  |  |  |  |
| Maximum System Voltage |  | 1500 V |  |  |  |  |  |
| Maximum Series Fuse Rating |  | 20A |  |  |  |  |  |
| Protection Class |  | Class II |  |  |  |  |  |
| Power tolerance |  |  |  | 0~+5W |  |  |  |

## I-V Curve at Different Irradance (450W)

*STC (Standard Test Condition): Irradiance $1000 \mathrm{~W} / \mathrm{m}^{2}$, Module Temperature $25^{\circ} \mathrm{C}$, AM 1.5
*NMOT(Under Nominal Module Operating Temperature), Irradiance of $800 \mathrm{~W} / \mathrm{m}^{2}$, Spectrum AM 1.5 , Ambient Temperature $20^{\circ} \mathrm{C}$, Wind Speed $1 \mathrm{~m} / \mathrm{s}$

## MECHNICAL DATA

| Cell Type | Mono-Crystalline |
| :---: | :---: |
| Cell Arrangement | $144 \mathrm{pcs}(2 \times(6 \times 12))$ |
| Dimension ( $\mathrm{L} \times \mathrm{W} \times \mathrm{H}$ ) | $2108 \times 1048 \times 35 \mathrm{~mm}$ |
| Weight | 27.3 kg |
| Front Cover | $2.0 \mathrm{~mm}+2.0 \mathrm{~mm}$ Half Tempered Glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68, 3 Bypass Diodes |
| Cable | $4 \mathrm{~mm}^{2} / 300 \mathrm{~mm}$ |
| Connector | Staubli EVO2 or MC4 Compatible |
| Snow/Wind Load | $5400 \mathrm{~Pa} / 2400 \mathrm{~Pa}$ |

## TEMPERATURE CHARACTERISTICS

| Temperature coefficient of Pmax | $-0.38 \%$ |
| :--- | :---: |
| Temperature coefficient of Voc | $-0.30 \%$ |
| Temperature coefficient of Isc | $0.06 \%$ |
| NMOT | $44 \pm 2^{\circ} \mathrm{C}$ |

## PACKING MANNER

| Packing Type | 40 HQ |
| :--- | :---: |
| Piece/Pallet | 30 |
| Pallet/Container | 22 |
| Piece/Container | 660 |

 into the binding contract made by the parties governing all transactions related to the purchase and sale of the produccts described herein.

