

# Tiger Mono-facial 450-470 Watt

Tiling Ribbon (TR) Technology

Positive power tolerance of 0~+3%



## KEY FEATURES



### TR technology + Half Cell

TR technology with Half cell aims to eliminate the cell gap to increase module efficiency (mono-facial up to 20.93%)



### 9BB instead of 5BB

9BB technology decreases the distance between bus bars and finger grid line which is benefit to power increase.



### Higher lifetime Power Yield

2.5% first year degradation,  
0.6% linear degradation



### Best Warranty

12 year product warranty,  
25 year linear power warranty



### Avoid debris, cracks and broken gate risk effectively

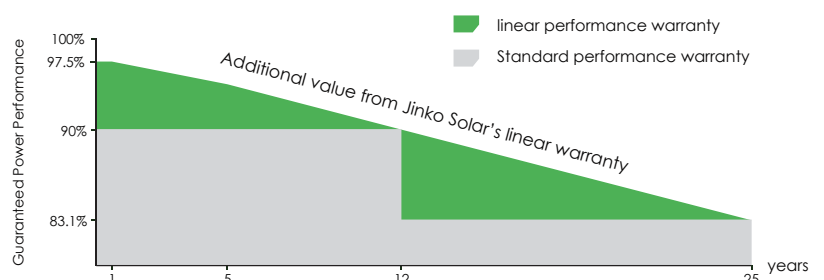
9BB technology using circular ribbon that could avoid debris, cracks and broken gate risk effectively



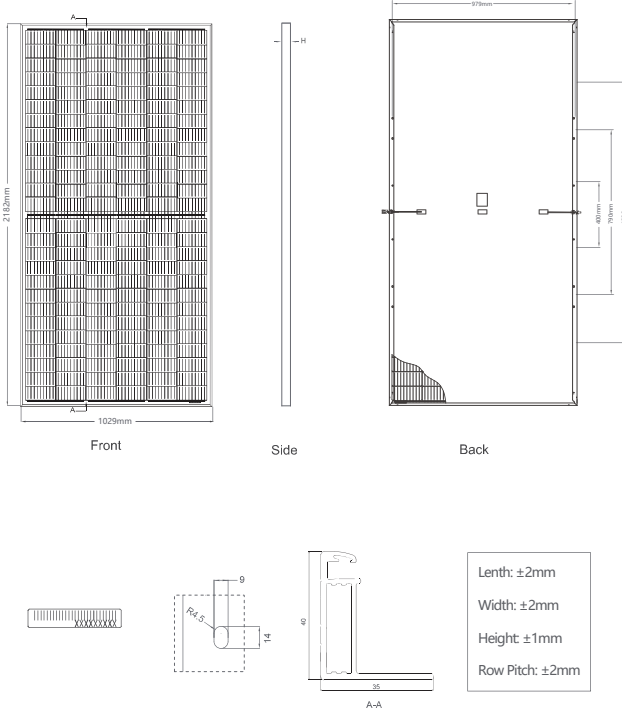
- ISO9001:2015, ISO14001:2015, OHSAS18001 certified factory
- IEC61215, IEC61730 certified product

## LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty • 25 Year Linear Power Warranty  
0.6% Annual Degradation Over 25 years



## Engineering Drawings

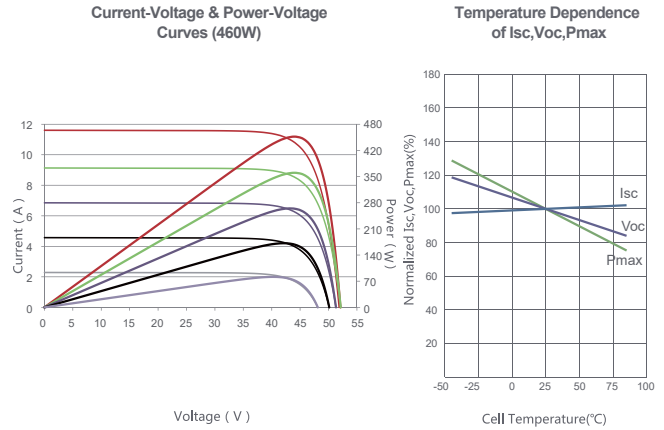


## Packaging Configuration

( Two pallets = One stack )

27pcs/pallets, 54pcs/stack, 540pcs/ 40'HQ Container

## Electrical Performance & Temperature Dependence



## Mechanical Characteristics

|               |   |
|---------------|---|
| Cell Type     | P type Mono-crystalline   |
| No. of cells  | 156 (2×78)  |
| Dimensions    | 2182×1029×40mm (85.91×40.51×1.57 inch)                                      |
| Weight        | 26.1 kg (57.54 lbs)   |
| Front Glass   | 3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass |
| Frame         | Anodized Aluminium Alloy  |
| Junction Box  | IP67 Rated  |
| Output Cables | TUV 1×4.0mm <sup>2</sup><br>(+): 290mm, (-): 145 mm or Customized Length    |

## SPECIFICATIONS

| Module Type                               | JKM450M-7RL3       |        | JKM455M-7RL3 |        | JKM460M-7RL3 |        | JKM465M-7RL3 |        | JKM470M-7RL3 |        |
|---|--------------------|--------|--------------|--------|--------------|--------|--------------|--------|--------------|--------|
|   | STC                | NOCT   | STC          | NOCT   | STC          | NOCT   | STC          | NOCT   | STC          | NOCT   |
| Maximum Power (Pmax)                      | 450Wp              | 335Wp  | 455Wp        | 339Wp  | 460Wp        | 342Wp  | 465Wp        | 346Wp  | 470Wp        | 350Wp  |
| Maximum Power Voltage (Vmp)               | 42.86V             | 39.20V | 42.97V       | 39.32V | 43.08V       | 39.43V | 43.18V       | 39.58V | 43.28V       | 39.69V |
| Maximum Power Current (Imp)               | 10.50A             | 8.54A  | 10.59A       | 8.61A  | 10.68A       | 8.68A  | 10.77A       | 8.74A  | 10.86A       | 8.81A  |
| Open-circuit Voltage (Voc)                | 51.50V             | 48.61V | 51.60V       | 48.70V | 51.70V       | 48.80V | 51.92V       | 49.01V | 52.14V       | 49.21V |
| Short-circuit Current (Isc)               | 11.32A             | 9.14A  | 11.41A       | 9.22A  | 11.50A       | 9.29A  | 11.59A       | 9.36A  | 11.68A       | 9.43A  |
| Module Efficiency STC (%)                 | 20.04%             |        | 20.26%       |        | 20.49%       |        | 20.71%       |        | 20.93%       |        |
| Operating Temperature(°C)                 | -40°C~+85°C        |        |              |        |              |        |              |        |              |        |
| Maximum system voltage                    | 1000/1500VDC (IEC) |        |              |        |              |        |              |        |              |        |
| Maximum series fuse rating                | 20A                |        |              |        |              |        |              |        |              |        |
| Power tolerance                           | 0~+3%              |        |              |        |              |        |              |        |              |        |
| Temperature coefficients of Pmax          | -0.35%/°C          |        |              |        |              |        |              |        |              |        |
| Temperature coefficients of Voc           | -0.28%/°C          |        |              |        |              |        |              |        |              |        |
| Temperature coefficients of Isc           | 0.048%/°C          |        |              |        |              |        |              |        |              |        |
| Nominal operating cell temperature (NOCT) | 45±2°C             |        |              |        |              |        |              |        |              |        |

\* STC: Irradiance 1000W/m<sup>2</sup> Cell Temperature 25°C

AM=1.5

NOCT: Irradiance 800W/m<sup>2</sup> Ambient Temperature 20°C

AM=1.5

Wind Speed 1m/s

\* Power measurement tolerance: ± 3%