

# 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

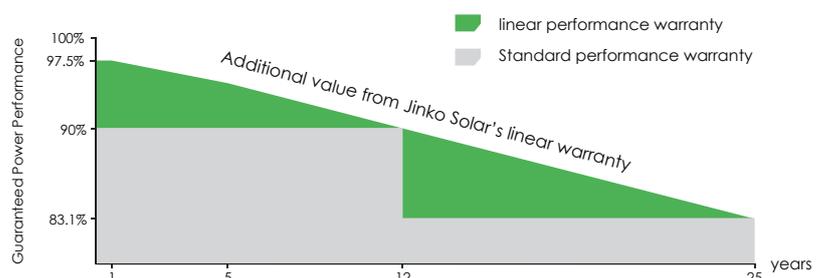
9BB technology using circular ribbon that could avoid debris, cracks and broken gate risk effectively



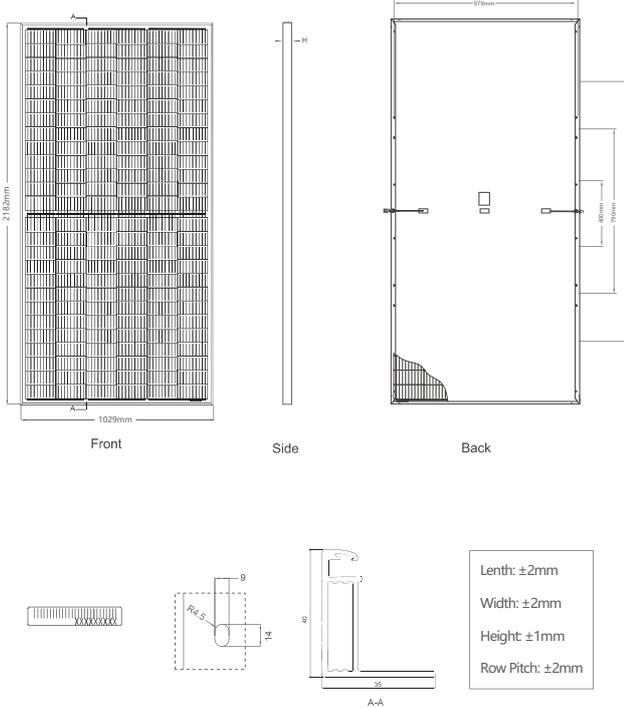
- ISO9001:2015, ISO14001:2015, OHSAS18001 certified factory
- IEC61215, IEC61730 certified product

## LINEAR PERFORMANCE WARRANTY

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



## Engineering Drawings



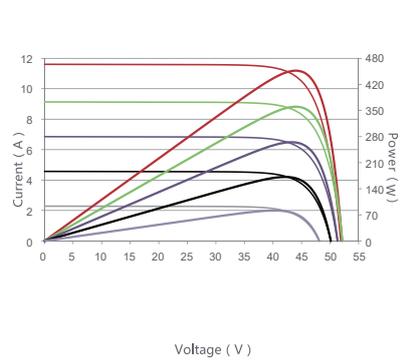
## Packaging Configuration

( Two pallets = One stack )

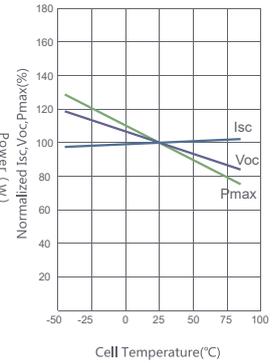
27pcs/pallets, 54pcs/stack, 540pcs/ 40'HQ Container

## Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (460W)



Temperature Dependence of Isc, Voc, Pmax



## 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> (+): 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%