

# Tiger Mono-facial 440-460 Watt

Tiling Ribbon (TR) Technology

Positive power tolerance of 0~+3%

ISO9001:2015, ISO14001:2015, OHSAS18001 certified factory

IEC61215, IEC61730 certified product



## 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 20.78%)



### 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



### Reduce Hot-spot issues

TR technology reduced the cell current in both bus bars and finger grid line to reduce hot-spot issues

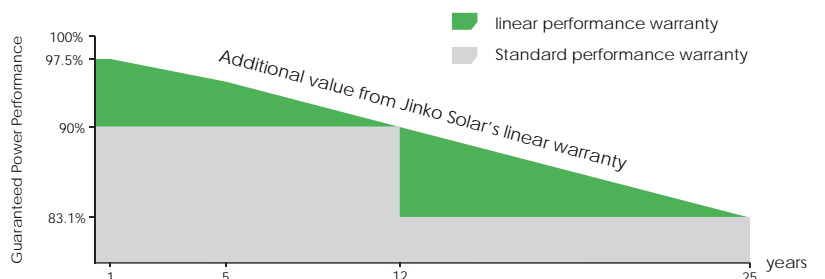


### Avoid debris, cracks and broken gate risk effectively

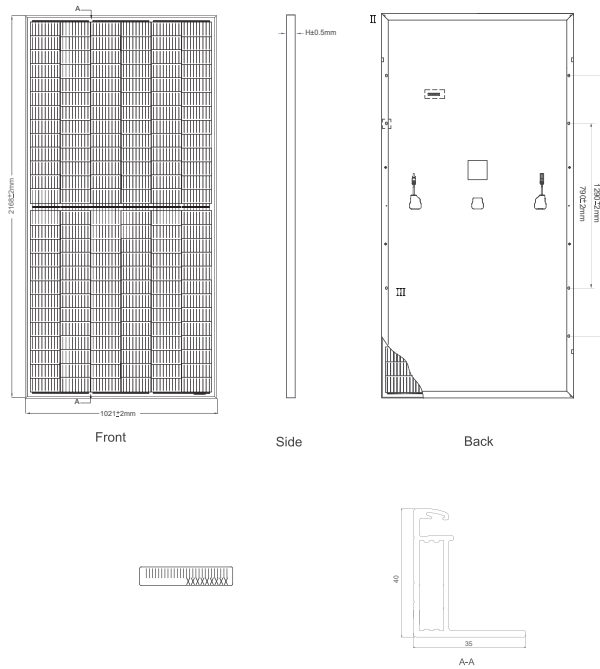
9BB technology using round wire ribbon that could avoid debris cracks and broken gate risk effectively

## LINEAR PERFORMANCE WARRANTY

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



## Engineering Drawings

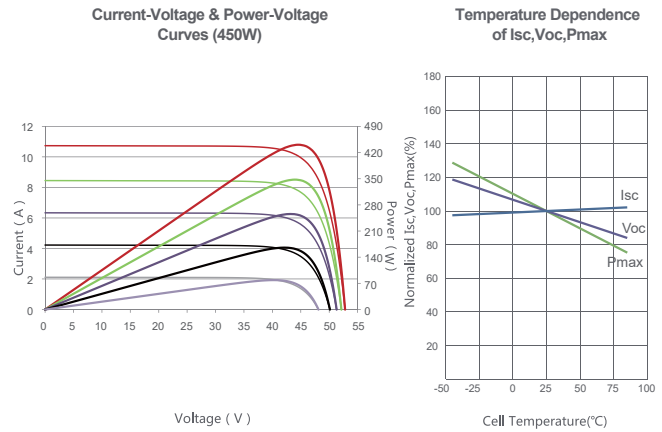


## Packaging Configuration

( 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	2168×1021×40mm (85.35×40.20×1.57 inch)
Weight	25.4 kg (56.0 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	JKM440M-7RL3-V		JKM445M-7RL3-V		JKM450M-7RL3-V		JKM455M-7RL3-V		JKM460M-7RL3-V	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	440Wp	327Wp	445Wp	330Wp	450Wp	334Wp	455Wp	338Wp	460Wp	342Wp
Maximum Power Voltage (Vmp)	43.66V	40.08V	43.73V	40.29V	43.82V	40.54V	43.90V	40.70V	44.02V	41.00V
Maximum Power Current (Imp)	10.08A	8.15A	10.18A	8.20A	10.27A	8.24A	10.37A	8.30A	10.45A	8.33A
Open-circuit Voltage (Voc)	52.38V	49.34V	52.48V	49.43V	52.58V	49.52V	52.68V	49.62V	52.78V	49.71V
Short-circuit Current (Isc)	10.77A	8.70A	10.82A	8.74A	10.87A	8.78A	10.92A	8.82A	10.97A	8.86A
Module Efficiency STC (%)	19.88%		20.10%		20.33%		20.56%		20.78%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	20A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.36%/°C									
Temperature coefficients of Voc	-0.29%/°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%

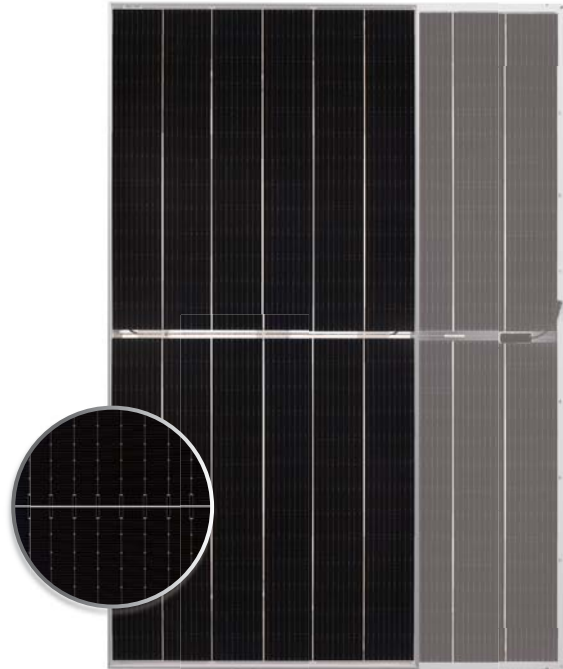
# Tiger Bifacial 440-460 Watt

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Positive power tolerance of 0~+3%

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IEC61215, IEC61730 certified product



## KEY FEATURES



### TR technology + Half Cell

TR technology with Half cell aims to eliminate the cell gap to increase module efficiency (bi-facial up to 20.28%)



### 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, 0.55% linear degradation



### Best Warranty

12 year product warranty, 30 year linear power warranty



### Reduce Hot-spot issues

TR technology reduced the cell current in both bus bars and finger grid line to reduce hot-spot issues

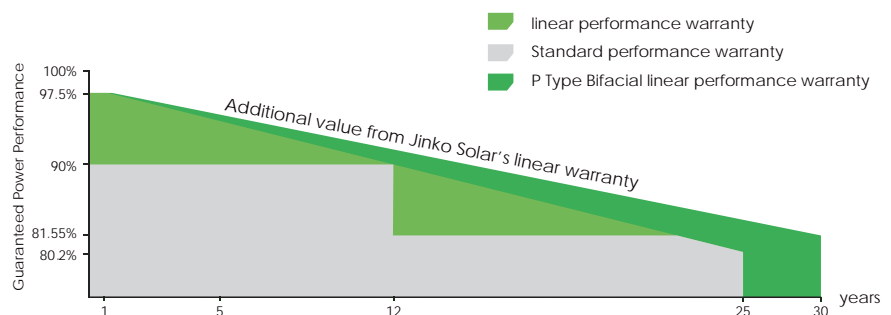


### Avoid debris, cracks and broken gate risk effectively

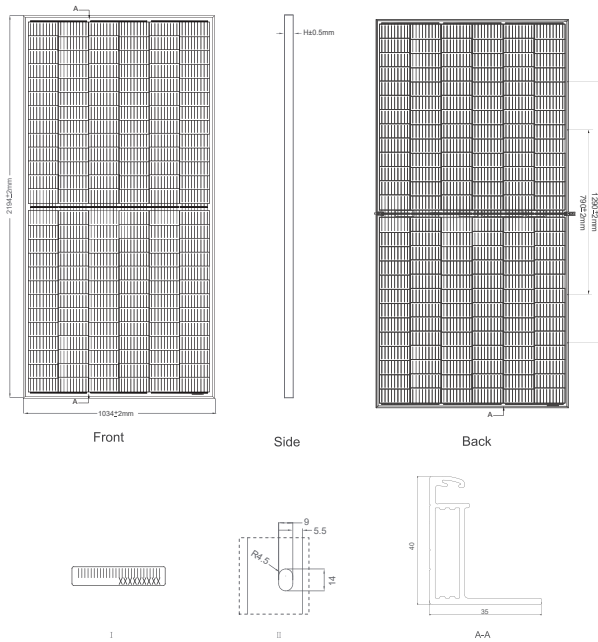
9BB technology using circular ribbon that could avoid debris, cracks and broken gate risk effectively

## LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty • 30 Year Linear Power Warranty  
0.55% Annual Degradation Over 30 years



## Engineering Drawings

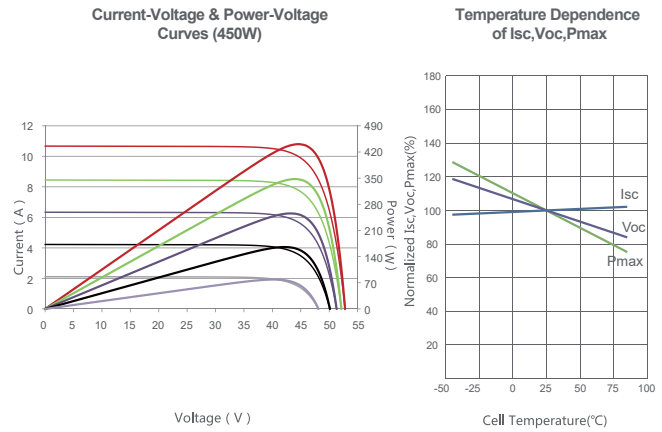


## Packaging Configuration

( 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	2194×1034×40mm (86.38×40.71×1.57 inch)
Weight	26.1 kg (57.5 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> (+): 250mm, (-): 150 mm or Customized Length

## SPECIFICATIONS

Module Type	JKM440M-7RL3-TV		JKM445M-7RL3-TV		JKM450M-7RL3-TV		JKM455M-7RL3-TV		JKM460M-7RL3-TV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	440Wp	327Wp	445Wp	330Wp	450Wp	334Wp	455Wp	338Wp	460Wp	342Wp
Maximum Power Voltage (Vmp)	43.66V	40.08V	43.73V	40.29V	43.82V	40.54V	43.90V	40.70V	44.02V	41.00V
Maximum Power Current (Imp)	10.08A	8.15A	10.18A	8.20A	10.27A	8.24A	10.37A	8.30A	10.45A	8.33A
Open-circuit Voltage (Voc)	52.38V	49.34V	52.48V	49.43V	52.58V	49.52V	52.68V	49.62V	52.78V	49.71V
Short-circuit Current (Isc)	10.77A	8.70A	10.82A	8.74A	10.87A	8.78A	10.92A	8.82A	10.97A	8.86A
Module Efficiency STC (%)	19.40%		19.62%		19.84%		20.06%		20.28%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	20A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.36%/°C									
Temperature coefficients of Voc	-0.29%/°C									
Temperature coefficients of Isc	0.048%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									
Refer. Bifacial Factor	70±5%									

## BIFACIAL OUTPUT-REAR SIDE POWER GAIN

		JKM440M-7RL3-TV	JKM445M-7RL3-TV	JKM450M-7RL3-TV	JKM455M-7RL3-TV	JKM460M-7RL3-TV
5%	Maximum Power (Pmax)	462Wp	467Wp	473Wp	478Wp	483Wp
	Module Efficiency STC (%)	20.37%	20.00%	20.83%	21.06%	21.29%
15%	Maximum Power (Pmax)	506Wp	512Wp	518Wp	523Wp	529Wp
	Module Efficiency STC (%)	22.30%	22.56%	22.81%	23.06%	23.32%
25%	Maximum Power (Pmax)	550Wp	556Wp	563Wp	569Wp	575Wp
	Module Efficiency STC (%)	24.24%	24.52%	24.80%	25.07%	25.35%

\* 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%

The company reserves the final right for explanation on any of the information presented hereby. Tiger JKM440-460M-7RL3-TV-EN-for All Energy