

# Tiger Pro 60HC

## 450-470 Watt

### MONO-FACIAL MODULE

#### P-Type

Positive power tolerance of 0~+3%

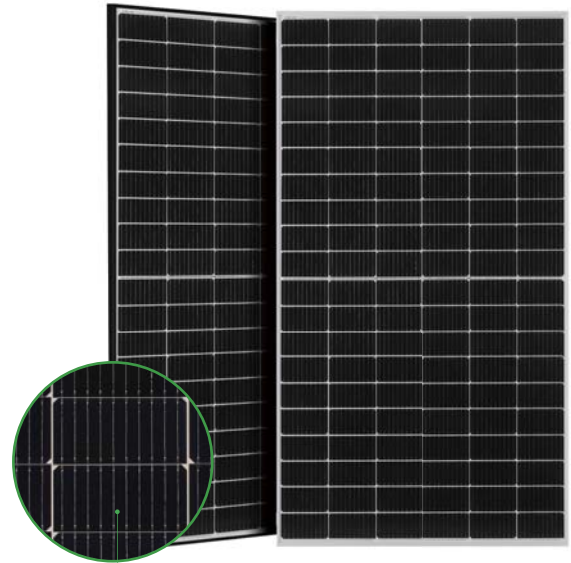
IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018

Occupational health and safety management systems



MBB HC Technology

## Key Features



#### Multi Busbar Technology

Better light trapping and current collection to improve module power output and reliability.



#### Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.



#### Reduced Hot Spot Loss

Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.



#### Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



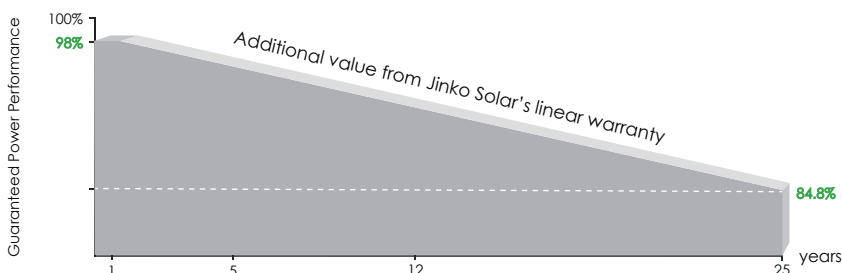
#### PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



POSITIVE QUALITY™  
Continuous Quality Assurance

## LINEAR PERFORMANCE WARRANTY

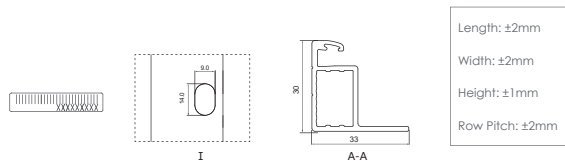
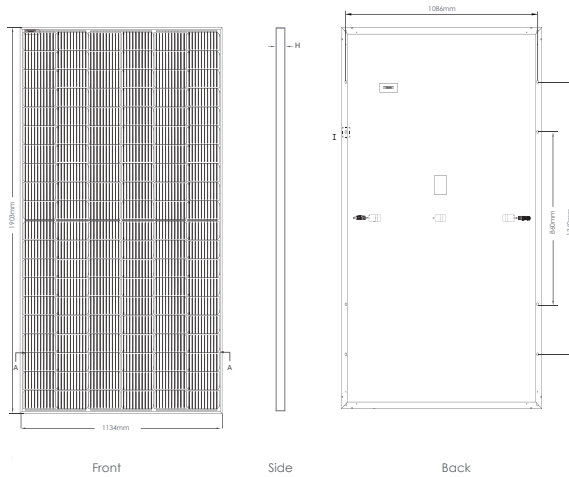


**12** Year Product Warranty

**25** Year Linear Power Warranty

**0.55%** Annual Degradation Over 25 years

## Engineering Drawings



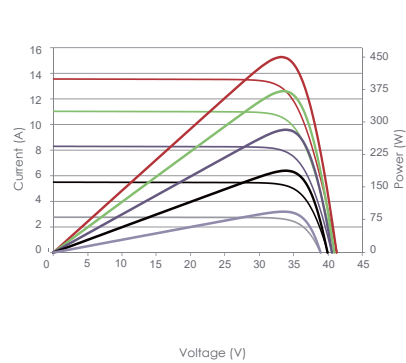
## Packaging Configuration

( Two pallets = One stack )

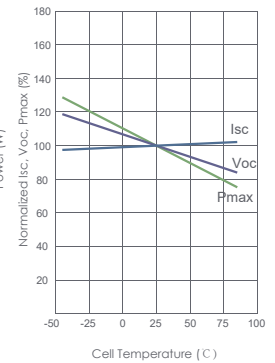
36pcs/pallets, 72pcs/stack, 864pcs/ 40'HQ Container

## Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (450W)



Temperature Dependence of Isc, Voc, Pmax



## Mechanical Characteristics

Cell Type	P type Mono-crystalline
No. of cells	120 (6×20)
Dimensions	1903×1134×30mm (74.92×44.65×1.18 inch)
Weight	24.2 kg (53.35 lbs)
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm <sup>2</sup> (+): 290mm, (-): 145mm or Customized Length

## SPECIFICATIONS

Module Type	JKM450M-60HL4		JKM455M-60HL4		JKM460M-60HL4		JKM465M-60HL4		JKM470M-60HL4	
	JKM450M-60HL4-V		JKM455M-60HL4-V		JKM460M-60HL4-V		JKM465M-60HL4-V		JKM470M-60HL4-V	
	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)	33.91V	31.73V	34.06V	31.91V	34.20V	32.07V	34.37V	32.12V	34.56V	32.32V
Maximum Power Current (Imp)	13.27A	10.55A	13.36A	10.61A	13.45A	10.67A	13.53A	10.77A	13.60A	10.82A
Open-circuit Voltage (Voc)	41.18V	38.87V	41.33V	39.01V	41.48V	39.15V	41.63V	39.29V	41.78V	39.43V
Short-circuit Current (Isc)	13.85A	11.19A	13.93A	11.25A	14.01A	11.32A	14.09A	11.38A	14.17A	11.34A
Module Efficiency STC (%)	20.85%		21.08%		21.32%		21.55%		21.78%	
Operating Temperature (°C)	-40°C~+85°C									
Maximum system voltage	1000/1500VDC (IEC)									
Maximum series fuse rating	25A									
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