



# Tiger 78TR 470-490 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



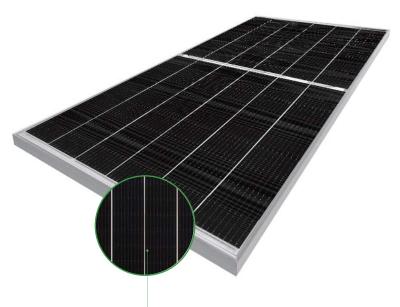












Tiling Ribbon (TR) Technology

# **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 21.38%)



#### 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% first year degradation, 0.55% linear degradation



#### **Best Warranty**

12 year product warranty, 25 year linear power warranty



#### **Enhanced Mechanical Load**

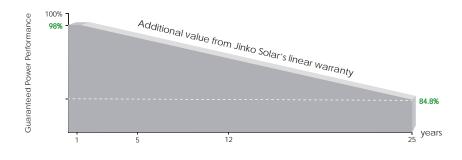
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



#### 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

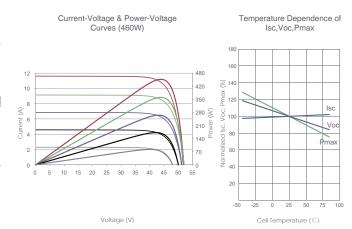


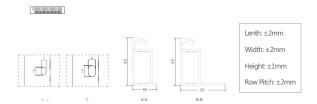
- **12** Year Product Warranty
- **25** Year Linear Power Warranty
- 0.55% Annual Degradation Over 25 years

### **Engineering Drawings**

# Front Side Back

#### Electrical Performance & Temperature Dependence





#### **Packaging Configuration**

(Two pallets = One stack)

31pcs/pallets, 62pcs/stack, 620pcs/40'HQ Container

Mechanical Characteristics							
Cell Type	P type Mono-crystalline						
No. of cells	156(2×78)						
Dimensions	2182×1029×35mm (85.91×40.51×1.38 inch)						
Weight	25.0kg (55.12 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 Lenath						

Module Type	JKM470M-7RL3 JKM470M-7RL3-V		JKM475M-7RL3 JKM475M-7RL3-V		JKM480M-7RL3 JKM480M-7RL3-V		JKM485M-7RL3 JKM485M-7RL3-V		JKM490M-7RL3 JKM490M-7RL3-V		
	STC	NOCT									
Maximum Power (Pmax)	470Wp	350Wp	475Wp	353Wp	480Wp	357Wp	485Wp	361Wp	490Wp	365Wp	
Maximum Power Voltage (Vmp)	43.28V	39.69V	43.38V	39.75V	43.48V	39.90V	43.58V	40.05V	43.68V	40.05V	
Maximum Power Current (Imp)	10.86A	8.81A	10.95A	8.89A	11.04A	8.95A	11.13A	9.01A	11.22A	9.08A	
Open-circuit Voltage (Voc)	52.14V	49.21V	52.24V	49.31V	52.34V	49.40V	52.44V	49.50V	52.54V	49.59V	
Short-circuit Current (Isc)	11.68A	9.43A	11.77A	9.51A	11.86A	9.58A	11.95A	9.65A	12.04A	9.72A	
Module Efficiency STC (%)	20.	20.93%		21.16%		21.38%		21.60%		21.82%	
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%/℃										
Temperature Coefficients of Voc	ts of Voc -0.28%/°C										
Temperature Coefficients of Isc	0.048%/℃										
Nominal Operating Cell Temperature		45±2℃									













