

# InfiniSolar V II

## Operation without battery



- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable charging current and voltage
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Monitoring software for real-time status display and control
- Parallel operation up to 9 units only for 2KW/3KW/5KW/6KW models
- Battery Independent system

ON-GRID INVERTER WITH ENERGY STORAGE

### InfiniSolar V II On-Grid Inverter With Energy Storage Selection Guide

MODEL	InfiniSolar V II 1.5KW	InfiniSolar V II 2KW	InfiniSolar V II 3KW-24V	InfiniSolar V II 3KW-48V	InfiniSolar V II 5KW	InfiniSolar V II 6KW
Phase	1-phase in / 1-phase out					
Maximum PV Input Power	2000W	3000W	4000W	4000 W	5000W	6000W
Rated Output Power	1500W	2000W	3000 W	3000W	5000W	6000W
Maximum Charging Power	2000W	2880W	2880W	2880W	5000W	5000W
<b>GRID-TIE OPERATION</b>						
<b>PV INPUT (DC)</b>						
Nominal DC Voltage / Maximum DC Voltage	120 VDC / 400 VDC	240 VDC / 450 VDC	360 VDC / 450 VDC	360 VDC / 450 VDC	60 VDC / 450 VDC	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	130VDC / 150 VDC	130VDC / 150 VDC	130VDC / 150 VDC	130VDC / 150 VDC	130VDC / 150 VDC	130VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 380 VDC	90 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 18 A	1 / 18 A	1 / 18A	1 / 18A	1 / 18A	1 / 27A
<b>GRID OUTPUT (AC)</b>						
Nominal Output Voltage	220/230/240 VAC					
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)					
Nominal Output Current	6.5A	8.7A	13A	13A	21.7A	26A
Power Factor	> 0.99					
<b>EFFICIENCY</b>						
Maximum Conversion Efficiency (DC/AC)	95%					
<b>OFF-GRID OPERATION</b>						
<b>AC INPUT</b>						
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC					
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC					
Frequency Range	50 Hz/60 Hz (Auto sensing)					
Maximum AC Input Current	30 A	30 A	40 A	40 A	40 A	40 A
<b>PV INPUT (DC)</b>						
Maximum DC Voltage	400 VDC	450 VDC	450 VDC	450 VDC	450 VDC	500 VDC
MPP Voltage Range	120 VDC ~ 380 VDC	90 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 18 A	1 / 18 A	1 / 18 A	1 / 18 A	1 / 18A	1 / 27A
<b>BATTERY MODE OUTPUT (AC)</b>						
Nominal Output Voltage	220/230/240 VAC					
Output Waveform	Pure sine wave					
Efficiency (DC to AC)	93%	93%	93%	93%	93%	93%
<b>HYBRID OPERATION</b>						
<b>PV INPUT (DC)</b>						
Nominal DC Voltage / Maximum DC Voltage	120 VDC / 400 VDC	240 VDC / 450 VDC	360 VDC / 450 VDC	360 VDC / 450 VDC	360 VDC / 450 VDC	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	130VDC / 150 VDC	130VDC / 150 VDC	130VDC / 150 VDC	130VDC / 150 VDC	120VDC / 150 VDC	130VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 380 VDC	90 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 18 A	1 / 18 A	1 / 18A	1 / 18A	1 / 18A	1 / 27A
<b>GRID OUTPUT (AC)</b>						
Nominal Output Voltage	220/230/240 VAC					
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)					
Nominal Output Current	6.5A	8.7A	13A	13A	21.7A	26A
<b>AC INPUT</b>						
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC					
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC					
Maximum AC Input Current	30 A	30 A	40 A	40 A	40 A	40 A
<b>BATTERY MODE OUTPUT (AC)</b>						
Nominal Output Voltage	220/230/240 VAC					
Efficiency (DC to AC)	93%	93%	93%	93%	93%	93%
<b>BATTERY &amp; CHARGER</b>						
Nominal DC Voltage	48 VDC	48 VDC	24 VDC	48 VDC	48 VDC	48 VDC
Maximum Solar Charging Current	30A	60 A	60 A	60 A	100 A	120 A
Maximum AC Charging Current	40A	60 A	60 A	60 A	100 A	120 A
Maximum Charging Current	40A	60 A	60 A	60 A	100 A	120 A
<b>GENERAL</b>						
<b>PHYSICAL</b>						
Dimension, D x W x H (mm)	100 x 300 x 440	120 x 295 x 468	120 x 295 x 468	120 x 295 x 468	120 x 295 x 468	120 x 295 x 468
Net Weight (kgs)	8	11	11	11	12	12
<b>INTERACE</b>						
Parallel Function	N/A	Yes, 9 units	Yes, 9 units	Yes, 9 units	Yes, 9 units	Yes, 9 units
Communication Port	USB or RS-232/Dry Contact					
<b>ENVIRONMENT</b>						
Humidity	0 ~ 90% RH (No condensing)					
Operating Temperature	-10°C to 50°C					

Product specifications are subject to change without further notice.



# Tiger Pro 72HC

## 530-550 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).

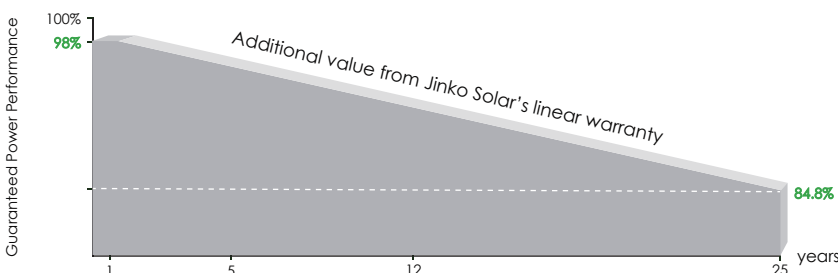


#### Longer Life-time Power Yield

0.55% annual power degradation and 25 year linear power warranty.



## LINEAR PERFORMANCE WARRANTY

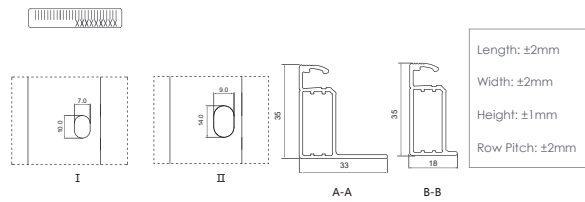
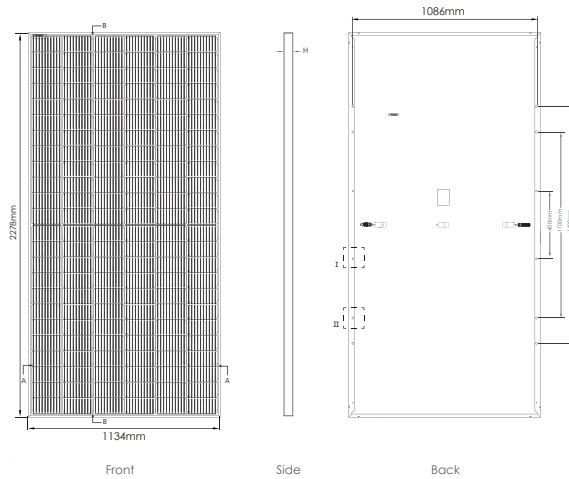


**12 Year Product Warranty**

**25 Year Linear Power Warranty**

**0.55% Annual Degradation Over 25 years**

## Engineering Drawings

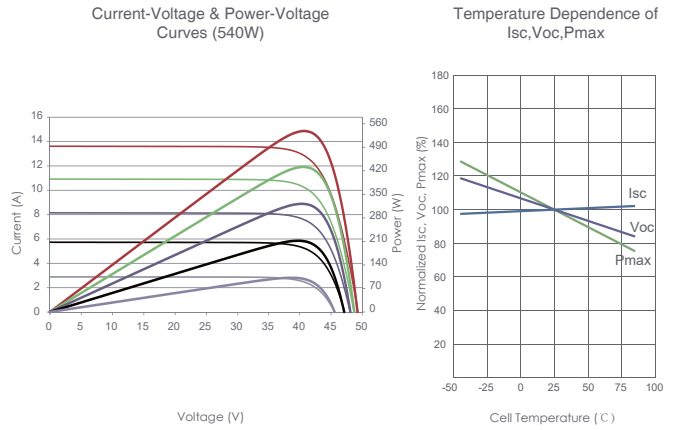


## Packaging Configuration

( Two pallets = One stack )

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

## Electrical Performance & Temperature Dependence



## Mechanical Characteristics

Cell Type	P type Mono-crystalline
No. of cells	144 (6×24)
Dimensions	2278×1134×35mm (89.69×44.65×1.38 inch)
Weight	28 kg (61.73 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> (+): 400mm, (-): 200mm or Customized Length

## SPECIFICATIONS

Module Type	JKM530M-72HL4		JKM535M-72HL4		JKM540M-72HL4		JKM545M-72HL4		JKM550M-72HL4	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	530Wp	394Wp	535Wp	398Wp	540Wp	402Wp	545Wp	405Wp	550Wp	409Wp
Maximum Power Voltage (Vmp)	40.56V	37.84V	40.63V	37.91V	40.70V	38.08V	40.80V	38.25V	40.90V	38.42V
Maximum Power Current (Imp)	13.07A	10.42A	13.17A	10.50A	13.27A	10.55A	13.36A	10.60A	13.45A	10.65A
Open-circuit Voltage (Voc)	49.26V	46.50V	49.34V	46.57V	49.42V	46.65V	49.52V	46.74V	49.62V	46.84V
Short-circuit Current (Isc)	13.71A	11.07A	13.79A	11.14A	13.85A	11.19A	13.94A	11.26A	14.03A	11.33A
Module Efficiency STC (%)	20.52%		20.71%		20.90%		21.10%		21.29%	
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