

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
GRID-TIE OPERATION						
PV INPUT (DC)						
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
GRID OUTPUT (AC)						
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					
EFFICIENCY						
Maximum Conversion Efficiency (DC/AC)	95%					
OFF-GRID OPERATION						
AC INPUT						
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
PV INPUT (DC)						
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
BATTERY MODE OUTPUT (AC)						
Nominal Output Voltage	220/230/240 VAC					
Output Waveform	Pure sine wave					
Efficiency (DC to AC)	93%	93%	93%	93%	93%	93%
HYBRID OPERATION						
PV INPUT (DC)						
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
GRID OUTPUT (AC)						
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
AC INPUT						
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
BATTERY MODE OUTPUT (AC)						
Nominal Output Voltage	220/230/240 VAC					
Efficiency (DC to AC)	93%	93%	93%	93%	93%	93%
BATTERY & CHARGER						
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
GENERAL						
PHYSICAL						
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
INTERACE						
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					
ENVIRONMENT						
Humidity	0 ~ 90% RH (No condensing)					
Operating Temperature	-10°C to 50°C					

Product specifications are subject to change without further notice.



DEEP BLUE 3.0

Mono

550W MBB Half-cell Module

JAM72S30 525-550/MR Series

Introduction

Assembled with 11BB PERC cells, the half-cell configuration of the modules offers the advantages of higher power output, better temperature-dependent performance, reduced shading effect on the energy generation, lower risk of hot spot, as well as enhanced tolerance for mechanical loading.



Higher output power



Lower LCOE



Less shading and lower resistive loss

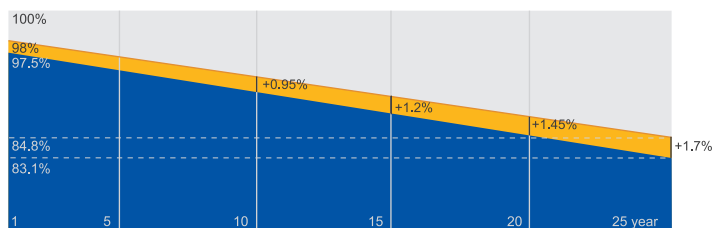


Better mechanical loading tolerance

Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty

0.55% Annual Degradation Over 25 years



■ New linear power warranty ■ Standard module linear power warranty

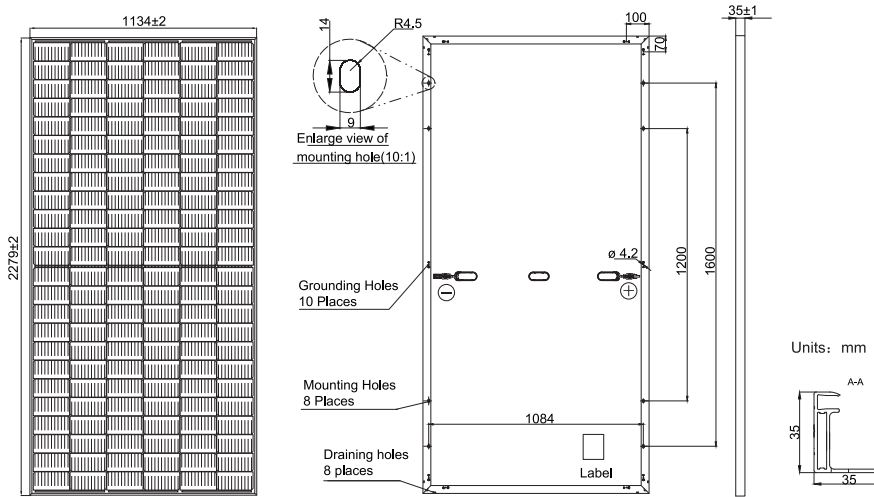
Comprehensive Certificates

- IEC 61215, IEC 61730, UL 61215, UL 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval



MECHANICAL DIAGRAMS

SPECIFICATIONS



Cell	Mono
Weight	28.6kg±3%
Dimensions	2279±2mm×1134±2mm×35±1mm
Cable Cross Section Size	4mm ² (IEC) , 12 AWG(UL)
No. of cells	144(6×24)
Junction Box	IP68, 3 diodes
Connector	MC4(1000V) MC4-EVO2(1500V)
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-); Landscape: 1300mm(+)/1300mm(-)
Packaging Configuration	31pcs/Pallet, 620pcs/40ft Container

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72S30 -525/MR	JAM72S30 -530/MR	JAM72S30 -535/MR	JAM72S30 -540/MR	JAM72S30 -545/MR	JAM72S30 -550/MR
Rated Maximum Power(Pmax) [W]	525	530	535	540	545	550
Open Circuit Voltage(Voc) [V]	49.15	49.30	49.45	49.60	49.75	49.90
Maximum Power Voltage(Vmp) [V]	41.15	41.31	41.47	41.64	41.80	41.96
Short Circuit Current(Isc) [A]	13.65	13.72	13.79	13.86	13.93	14.00
Maximum Power Current(Imp) [A]	12.76	12.83	12.90	12.97	13.04	13.11
Module Efficiency [%]	20.3	20.5	20.7	20.9	21.1	21.3
Power Tolerance	0~+5W					
Temperature Coefficient of Isc(α _{Isc})	+0.045%/°C					
Temperature Coefficient of Voc(β _{Voc})	-0.275%/°C					
Temperature Coefficient of Pmax(γ _{Pmp})	-0.350%/°C					
STC	Irradiance 1000W/m ² , cell temperature 25°C, AM1.5G					

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer.They only serve for comparison among different module types.

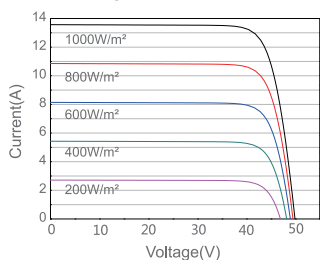
ELECTRICAL PARAMETERS AT NOCT

OPERATING CONDITIONS

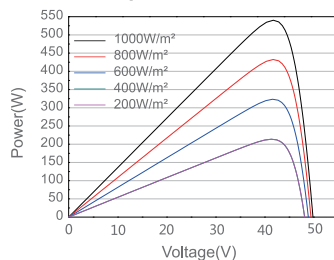
TYPE	JAM72S30 -525/MR	JAM72S30 -530/MR	JAM72S30 -535/MR	JAM72S30 -540/MR	JAM72S30 -545/MR	JAM72S30 -550/MR		
Rated Max Power(Pmax) [W]	397	401	405	408	412	416	Maximum System Voltage	1000V/1500V DC
Open Circuit Voltage(Voc) [V]	46.05	46.18	46.31	46.43	46.55	46.68	Operating Temperature	-40°C~+85°C
Max Power Voltage(Vmp) [V]	38.36	38.57	38.78	38.99	39.20	39.43	Maximum Series Fuse Rating	25A
Short Circuit Current(Isc) [A]	10.97	11.01	11.05	11.09	11.13	11.17	Maximum Static Load,Front* Maximum Static Load,Back*	5400Pa(112lb/ft ²) 2400Pa(50lb/ft ²)
Max Power Current(Imp) [A]	10.35	10.39	10.43	10.47	10.51	10.55	NOCT	45±2°C
NOCT	Irradiance 800W/m ² , ambient temperature 20°C,wind speed 1m/s, AM1.5G						Safety Class	Class II
							Fire Performance	UL Type 1

CHARACTERISTICS

Current-Voltage Curve JAM72S30-540/MR



Power-Voltage Curve JAM72S30-540/MR



Current-Voltage Curve JAM72S30-540/MR

