

DEEP BLUE 3.0

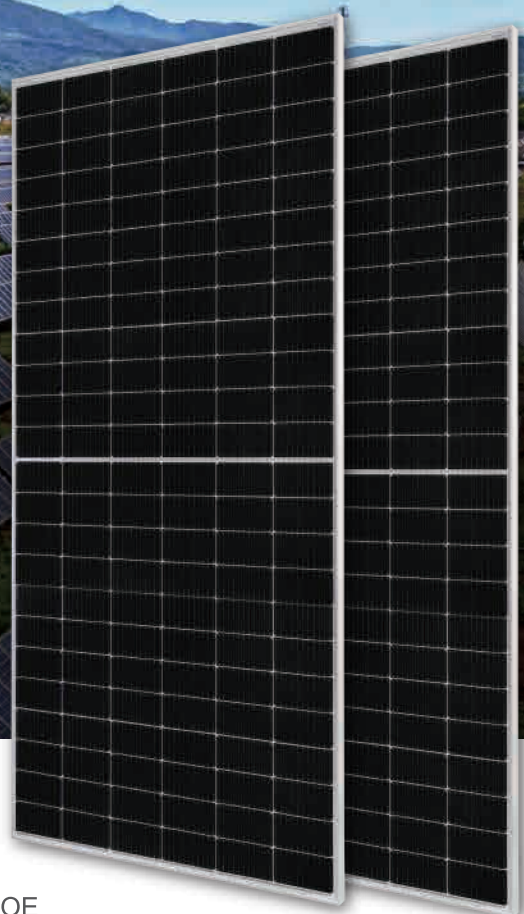
Mono

555W MBB Half-cell Module

JAM72S30 530-555/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

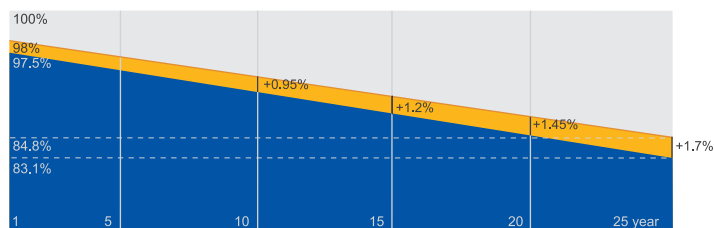


Better mechanical loading tolerance

Superior Warranty

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

0.55% Annual Degradation Over 25 years



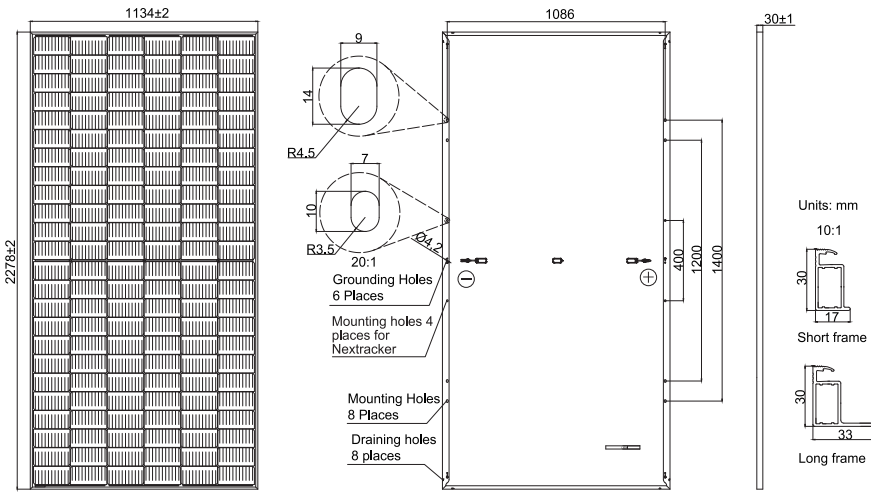
■ New linear power warranty ■ Standard module linear power warranty

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 62941: 2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing



MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	27.3kg
Dimensions	2278±2mm×1134±2mm×30±1mm
Cable Cross Section Size	4mm ² (IEC) , 12 AWG(UL)
No. of cells	144(6×24)
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2/ QC 4.10-351
Cable Length (Including Connector)	Portrait: 200mm(+)/300mm(-); Landscape: 1300mm(+)/1300mm(-)
Packaging Configuration	36pcs/Pallet 720pcs/40HQ Container

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72S30 -530/MR	JAM72S30 -535/MR	JAM72S30 -540/MR	JAM72S30 -545/MR	JAM72S30 -550/MR	JAM72S30 -555/MR
Rated Maximum Power(Pmax) [W]	530	535	540	545	550	555
Open Circuit Voltage(Voc) [V]	49.30	49.45	49.60	49.75	49.90	50.02
Maximum Power Voltage(Vmp) [V]	41.31	41.47	41.64	41.80	41.96	42.11
Short Circuit Current(Isc) [A]	13.72	13.79	13.86	13.93	14.00	14.07
Maximum Power Current(Imp) [A]	12.83	12.90	12.97	13.04	13.11	13.18
Module Efficiency [%]	20.5	20.7	20.9	21.1	21.3	21.5
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

TYPE	JAM72S30 -530/MR	JAM72S30 -535/MR	JAM72S30 -540/MR	JAM72S30 -545/MR	JAM72S30 -550/MR	JAM72S30 -555/MR
Rated Max Power(Pmax) [W]	401	405	408	412	416	420
Open Circuit Voltage(Voc) [V]	46.18	46.31	46.43	46.55	46.68	46.85
Max Power Voltage(Vmp) [V]	38.57	38.78	38.99	39.20	39.43	39.66
Short Circuit Current(Isc) [A]	11.01	11.05	11.09	11.13	11.17	11.21
Max Power Current(Imp) [A]	10.39	10.43	10.47	10.51	10.55	10.59
NOCT	Irradiance 800W/m ² , ambient temperature 20°C,wind speed 1m/s, AM1.5G					

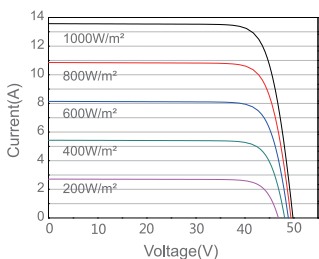
*For NexTracker installations, Maximum Static Load, Front is 1800Pa while Maximum Static Load, Back is 1800Pa.

OPERATING CONDITIONS

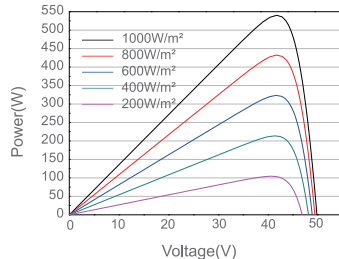
Maximum System Voltage	1000V/1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	25A
Maximum Static Load,Front* Maximum Static Load,Back*	5400Pa(112lb/ft ²) 2400Pa(50lb/ft ²)
NOCT	45±2°C
Safety Class	Class II
Fire Performance	UL Type 1

CHARACTERISTICS

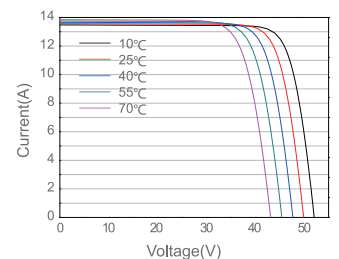
Current-Voltage Curve JAM72S30-540/MR



Power-Voltage Curve JAM72S30-540/MR



Current-Voltage Curve JAM72S30-540/MR



HYBRID INVERTER

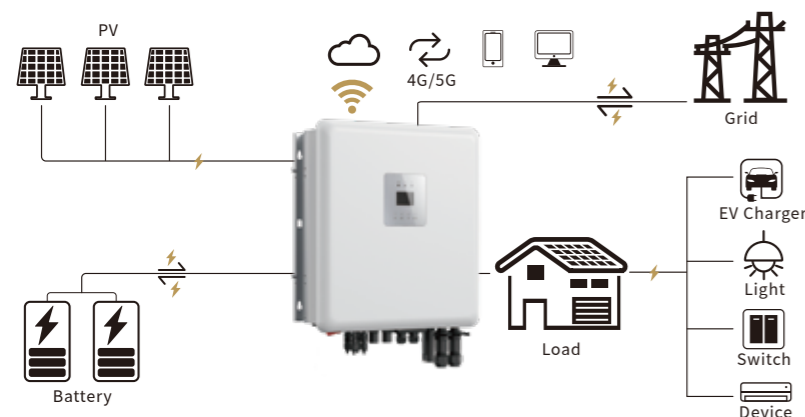
Zonergy Venus 5000-S9
EU Standard Single Phase

MAX.MPPT EFFICIENCY 99.90%
IP65 DESIGNED FOR OUTDOOR
5/10/15 YEARS WARRANTY
NATURAL COOLING DESIGN
SLA&LFP BATTERIES SUPPORT

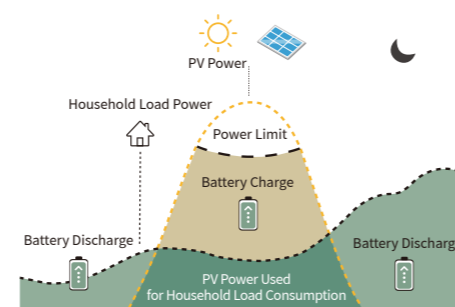


CE Grid Code EN 50549-1 VDE 4105 CEI 0-21 NTs type A

Connection

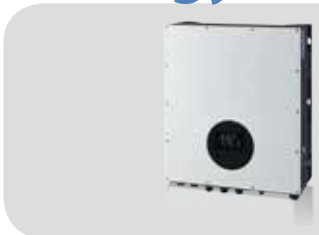


Working Mode



ZONERGY VENUS 5000-S9		
DC Input (PV)	Recommended max. PV input power	8000W
	Rated input voltage	380V
	MPPT operating voltage range	120-550V
	Number of MPPT	2
	Max. number of input strings per MPPT	1
	Max. input current per MPPT	13/13A
	Max. short-circuit current per MPPT	20A
AC output (on-grid)	Rated output power	5000W
	Rated output current	21.7A
	Rated grid voltage	230V
	Rated grid frequency	50/60Hz
	THDi	<3%
	Power factor	-0.8~+0.8
Battery parameters	Battery type	SLA & LFP
	Battery voltage range	40-60V
	Max. charge/discharge current	100A
	BMS communication mode	485;CAN
AC output (off-grid)	Rated output power	5000W
	Rated output current	21.7A
	Rated output voltage	230V
	Frequency	50/60Hz
	Surge power	5000VA
	THDv (@ linear load)	<3%
	Switching time	<10ms
Efficiency	Max. MPPT efficiency	99.90%
	Max. efficiency	98.00%
	European efficiency	97.10%
	Max. efficiency of charging/discharging	94.00%
Protection	✓ DC switch ✓ PV reverse connection protection ✓ Battery reverse connection protection ✓ Output short-circuit protection ✓ Output overvoltage protection ✓ Insulation impedance detection ✓ Residual current detection ✓ Anti-island protection	
	Surge protection	PV: Type III, AC: Type III
General parameters	IP rating	IP65
	Operating temperature range	-25~60°C
	Relative humidity range	0~95%
	Installation type	Wall mounted
	Cooling mode	Natural cooling
	Communication	Wi-Fi;R485;CAN;GPRS
	Display	LCD;APP
MECHANICAL SPECIFICATIONS	Inverter dimensions (W*H*D) (mm)	535*485*198.5
	Net weight (kg)	29Kg
	Shipping dimensions (W*H*D) (mm)	715*565*331
	Gross weight (kg)	30.5Kg
Container (20GP/40GP/40HQ)		

Zonergy Venus 10K-T9 15K-T9



- IP65 waterproof and dustproof makes the inverter available for various working conditions
- Built-in AC coupled function
- Built-in WiFi for mobile monitoring (App is available)
- 150% unbalanced load support
- Maximum PV input current 27A
- Dual outputs for smart load management
- User-adjustable charging current
- Reserved communication port for BMS (RS485)
- Parallel operation up to 6 units

Zonergy Venus Three Phase Hybrid Inverter with Energy Storage Selection Guide

MODEL	Zonergy Venus 10K-T9	Zonergy Venus 15K-T9
MAXIMUM PV INPUT POWER	16000 W	22500 W
RATED OUTPUT POWER	10000 W	15000 W
MAXIMUM CHARGING POWER	10000 W	15000 W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 1000 VDC	
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	
MPP Voltage Range	350 VDC ~ 950 VDC	
Number of MPP Trackers / Maximum Input Current	2 / A: 27A, B: 27A	
Number of Strings Per MPP Tracker	A: 2, B: 2	
GRID OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase	
Nominal Output Current	17.4 A per phase	21.7 A per phase
Power Factor range	0.9 lag ~ 0.9 lead	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	>96%	
European Efficiency@ Vnominal	>95%	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC	
Acceptable Input Voltage Range	170 - 290 VAC per phase	
Maximum AC Input Current	40 A	40 A
PV INPUT (DC)		
Maximum DC Power	16000 W	22500 W
Maximum DC Voltage	1000 VDC	1000 VDC
MPP Voltage Range	350 VDC ~ 950 VDC	
Number of MPP Trackers / Maximum Input Current	2 / A: 27A, B: 27A	
Number of Strings Per MPP Tracker	A: 2, B: 2	
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Waveform	Pure sine wave	
HYBRID OPERATION		
PV INPUT (DC)		
Maximum DC Voltage	1000 VDC	
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	
MPP Voltage Range	350 VDC ~ 950 VDC	
Number of MPP Trackers / Maximum Input Current	2 / A: 27A, B: 27A	
Number of Strings Per MPP Tracker	A: 2, B: 2	
GRID OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase	
Nominal Output Current	17.4 A per phase	21.7 A per phase
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC	
Acceptable Input Voltage Range	170 - 290 VAC per phase	
Maximum AC Input Current	40 A	40 A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
BATTERY & CHARGER		
Battery Voltage Range	40 ~ 62 VDC	40 ~ 62 VDC
Maximum Charging Current	250 A	300 A
GENERAL		
PHYSICAL		
Dimension, D x W x H (mm)	255 x 660 x 750	
Net Weight (kgs)	75	78
INTERFACE		
Communication Port	RS-232, RS-485, USB, CAN and Wi-Fi	
Intelligent Slot	Optional for SNMP and Modbus cards	
ENVIRONMENT		
Humidity	0 ~ 100% RH (Non-condensing)	
Operating Temperature	-25 to 60°C, > 45°C power derating	
Altitude	0 ~ 1000 m**	

*These figures are based on VDE-4105 standard. All figures may vary depending on different AC voltage and country requirements.

** Power derating 1% every 100 m when altitude is over 1000m
Product specifications are subject to change without further notice.