

Grid Tied Solar String Inverters

HIVERTER-Si Series

1.1 kW to 3.3 kW – Single Phase (1000 VDC)

Key Features

- Wide DC input range
- Transformer less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 1 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -30°C to 60°C
- IP 65 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Type III SPD (Surge Protection Device)
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-2 IEC 61000-6-4

Technical Specifications

Solar String Inverter – 1.1 kW To 3.3 KW (1Ph.)

HIVERTER-Si Series Single Phase with Single MPPT		Si-1.1K-H3	Si-1.6K-H3	Si-2.2K-H3	Si-2.7K-H3	Si-3K-H3	Si-3.3K-H3
Input (DC)	Recommended PV input power	1500 W	2200 W	3000 W	3700 W	4100 W	4500 W
	Max. input voltage	500 V	500 V	500 V	550 V	550 V	550 V
	Start-up input voltage	70 V					
	Rated input voltage	360 V					
	MPPT voltage range	50 - 500 V			50 - 550 V		
	Full load DC voltage range	110 - 450 V	150 - 450 V	200 - 450 V	250 - 500 V	275 - 500 V	300 - 500 V
	Max. input MPPT current	12 A					
	Max. DC input short circuit current per MPPT	15 A					
	Number of MPPT/String per MPPT	1 / 1					
	Input terminal type	MC 4					
Output (AC)	Rated power	1.1 kW	1.6 kW	2.2 kW	2.7 kW	3 kW	3.3 kW
	Max. AC power	1.1 kVA	1.6 kVA	2.2 kVA	2.7 kVA	3 kVA	3.3 kVA
	Max. output current	5.3 A	7.7 A	10.6 A	13 A	14.5 A	16 A
	Nominal grid volatge	L / N / PE, 230 Vac					
	Grid voltage range	180 Vac-276 Vac (According to local standard)					
	Nominal frequency	50 / 60 Hz					
	Grid frequency range	45~55 Hz / 55~66 Hz (According to local standard)					
	THDi	<3%					
Efficiency up to	Power factor	1 default (adjustable ±0.8)					
	Max. Efficiency up to	97.43%	97.50%	97.47%	97.38%	97.20%	97.20%
Protection	European weighted efficiency	96.9%			97.2%		
	Anti-Islanding protection	Yes					
	DC reverse polarity protection	Yes					
	Over temp protection	Yes					
	Leakage current protection	Yes					
	Over voltage protection	Yes					
	Over current protection	Yes					
	Earth fault protection	Yes					
	SPD	MOV: Type III standard					
Communication	Standard Communication mode	Rs 485, USB (Optional: Wi-Fi / Ethernet)					
General Data	Topology	Transformer less					
	Ambient temperature range	-30°C ~ +60°C					
	Allowable relative humidity range	0~100%					
	Noise	<25 dB					
	DC switch	Optional					
	Cooling	Natural convection					
	Max. operating altitude	2000 m					
	Dimension	303 x 260.5 x 118 mm			321 x 260.5 x 131.5 mm		
	Support bracket	Wall - mounted					
	Weight	5.5 kg			6.3 kg		
	Display	LCD + LED					
	Degree of protection	IP 65					
Standard	EMC	EN 61000 - 6 - 1, EN 61000 - 6 - 2, EN 61000 - 6 - 3, EN 61000 -6 - 4,					
	Safety standard	IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 62109 - 1/2					
	Grid standards	AS 4777, VDE V 0124 - 100, VDE V 0126 - 1 - 1, VDE -AR -N 4105, EN 50438, G83 / 2, C10 / 11, RD 1699					

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