

**NEW  
GENERATION**

## Grid Tied Solar String Inverters

HIVERTER-Si-N Series

3.3 kW to 12 kW – Three Phase (1100 VDC)

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 2 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99%
- 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 II SPD (Surge Protection Device)



### 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 – 3.3 kW to 12 kW (3Ph.)

HIVERTER-Si-N Series Three Phase with Dual MPPT		Si-3.3K-N	Si-4.4K-N	Si-5.5K-N	Si-6.6K-N	Si-8.8K-N	Si-11K-N	Si-12K-N	
Input (DC)	Recommended PV input power	4.5 kWp	6k Wp	7.5 kWp	9 kWp	12 kWp	15 kWp	18 kWp	
	Number of independent MPPT	2							
	Number of DC inputs	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 2	
	Max. input voltage	1100 V							
	Start-up input voltage	160 V							
	Rated input voltage	650 V							
	MPPT operating voltage range	140 - 1000 V							
	Full power MPPT voltage range	160 V - 850 V	190 V - 850 V	240 V - 850 V	290 V - 850 V	380 V - 850 V	420 - 850 V	460 - 850 V	
	Max. input current per MPPT	15 A / 15 A	15 A / 15 A	15 A / 15 A	15 A / 15 A	15 A / 15 A	15 A / 15 A	15 A / 30 A	
Output (AC)	Rated power	3 kW	4 kW	5 kW	6 kW	8 kW	10 kW	12 kW	
	Max. AC power	3.3 kVA	4.4 kVA	5.5 kVA	6.6 kVA	8.8 kVA	11 kVA	13.2 kVA	
	Max. output current	5 A	6.7 A	8.3 A	10 A	13.3 A	16.7 A	20 A	
	Nominal grid voltage	3 / N / P E, 230 Vac / 240 Vac							
	Grid voltage range	310 Vac - 480 Vac (according to local standard)							
	Nominal frequency	50 / 60 Hz							
	Grid frequency range	45-55 Hz / 55-65 Hz (according to local standard)							
	Active power adjustable range	0~100%							
	THDi	<3%							
	Power factor	1 default (adjustable ±0.8)							
	Performance	Max. Efficiency up to	98.18%	98.26%	98.23%	98.23%	98.33%	98.34%	98.30%
		European weighted efficiency	97.50%					98.00%	
	Protection	Self-consumption at night	<1 W						
DC reverse polarity protection		Yes							
Anti-Islanding protection		Yes							
Ground fault monitoring		Yes							
PV-array string fault monitoring		Yes							
Anti-reverse power function		Yes							
DC Switch		Yes							
Communication	Input / Output SPD	PV: type II standard, AC: type II standard							
	Standard Communication mode	Rs 485 / USB / Bluetooth (Optional: Wi-Fi)							
General Data	Ambient temperature range	-30°C ~ +60°C							
	Topology	Transformer less							
	Degree of protection	IP 65							
	Allowable relative humidity range	0~100%							
	Max. operating altitude	4000 m							
	Noise	<40 dB							
	Weight	17 kg				18 kg			
	Cooling	Natural							
	Dimension	430*385*182 mm							
	Display	LCD & Bluetooth + APP							
Standard	Standard warranty	5 years (Optional: 7 & 10 years)							
	EMC	EN 61000 - 3 - 2, EN 61000 - 3 - 3, EN 61000 - 3 - 11, EN 61000-3-12, EN 61000 - 6 - 1, EN 61000 - 6 - 3							
	Safety standard	IEC 62109 - 1 / 2, IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30)							
Grid standards	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, UNE 206 007-1, EN50549, G98/G99, EN50530, NB/T32004								

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