

**NEW
GENERATION**

Grid Tied Solar String Inverters

HIVERTER-Si-N Series

15 kW & 20 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)
- Remote monitoring using a mobile based application through 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 – 15 kW & 20 KW (3Ph.)

HIVERTER-Si-N Series Three Phase with Dual MPPT		Si-15K-N	Si-20K-N
Input (DC)	Recommended PV input power	22.5 kWp	30 kWp
	Number for independent MPPT	2	
	Number for DC inputs	2 / 2	
	Max. input voltage	1100 V	
	Start-up input voltage	160 V	
	Rated input voltage	650 V	
	MPPT voltage range	140 - 1000 V	
	Full load DC voltage range	420 V - 850 V	480 V - 850 V
	Max. input MPPT current	26 A / 26 A	26 A / 26 A
Output (AC)	Max. DC input short circuit current per MPPT	36 A / 36 A	36 A / 36 A
	Rated power	15 kW	20 kW
	Max. AC power	16.5 kVA	22 kVA
	Max. output current	23.9 A	31.9 A
	Nominal grid voltage	3 / N / PE, 230 V / 400 Vac	
	Grid voltage range	310Vac-480Vac (According to local standard)	
	Nominal frequency	50 Hz / 60 Hz	
	Grid frequency range	45 Hz - 55 Hz / 55 Hz - 65 Hz (According to local standard)	
	Active power adjustable range	0~100%	
Performance	THDi	<3%	
	Power factor	1 default (adjustable ±0.8)	
	Max. Efficiency up to	98.60%	
	European weighted efficiency up to	98.20%	
Protection	Self-consumption at night	<1W	
	MPPT efficiency	>99.9%	
	DC reverse polarity protection	Yes	
	Anti-islanding Protection	Yes	
	Leakage Current protection	Yes	
	Ground Fault monitoring	Yes	
	PV-array string fault monitoring	Yes	
	Anti-reverse power function	Optional	
Communication	DC Switch	Yes	
	Input / Output SPD	PV: type II standard, AC: type II standard	
General Data	Standard Communication mode	RS 485 / USB / Bluetooth (Optional: WIFI / Ethernet)	
	Ambient temperature range	-30°C~+60°C	
	Topology	Transformer - less	
	Degree of protection	IP65	
	Allowable relative humidity range	0~100%	
	Max. operating altitude	4000m	
	Noise	<40dB	
	Weight	20 kg	22 kg
	Cooling	Fan	
	Dimension	520*430*189mm	
Standard	Display	LCD & Bluetooth + APP	
	Standard Warranty	5 Years (Optional: 7 & 10 Years)	
	EMC	EN 61000 - 6 - 1, EN 61000 - 6 - 3, EN 61000 - 6 - 3 - 11, EN 61000 - 6 - 3 - 12	
	Safety standard	IEC 62109 - 1 / 2, IEC 62116, IEC 61727, IEC 61683, IEC 60068 (1,2,14,30)	
Standard	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, EN 50549, G 98/ G 99, EN 50530, NB / T 32004	

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