HITACHI
Inspire the Next

Grid Tied Solar String Inverters

HIVERTER-Si-N Series
60 kW to 80 kW – Three Phase (1100 VDC)

NEW GENERATION

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
- 6 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 66 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
- Reactive power controller
- Type II SPD (Surge Protection Device)
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- 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

Grid Tied Solar String Inverter

Technical Specifications

Solar String Inverter – 60 kW & 80 kW (3Ph.)

HIVERTER-Si-N Series Three Phase with Six MPPT		**Si-60K-N**	**Si-80K-N**
Input (DC)	Recommended PV input power	90 kWp	120 kWp
	Number for independent MPPT	6	
	Number for DC inputs	2 Per MPPT	
	Max. input voltage	1100 V	
	Start-up input voltage	200 V	
	Rated input voltage	620 V	
	MPPT voltage range	180 - 1000 V	
	Full load DC voltage range	550V - 800 V	
	Max. input MPPT current	6 x 32 A	6 x 40 A
	Max. DC input short circuit current per MPPT	6 x 50 A	6 x 60 A
Output (AC)	Rated power	60 kW	80 kW
	Max. AC power	66 kVA	88 kVA
	Max. output current	100 A	133.3 A
	Nominal grid voltage	3 / N / PE, 230 / 400 Vac	
	Grid voltage range	310 - 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	98.70%	
	European weighted efficiency up to	98.20%	
	Self-consumption at night	<2W	
Protection	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	Yes	
	DC Switch	Yes	
	Input / Output SPD	PV: type II standard, AC: type II standard	
Communication	Standard Communication mode	RS 485 / Bluetooth (Optional: WIFI / Ethernet)	
General Data	Ambient temperature range	-30℃~+60℃	
	Topology	Transformer - less	
	Degree of protection	IP 66	
	Allowable relative humidity range	0~100%	
	Max. operating altitude	4000 m	
	Weight	50 kg	
	Cooling	Fan	
	Dimension (mm)	687*561*275 mm	
	Display	LCD, App via Bluetooth	
	Standard Warranty	5 years (Optional: 7 & 10 years)	
Standard	EMC	EN 61000 - 6 - 2, EN 61000 - 6 - 3, EN 61000 -3 - 11, EN 61000 -3 - 12	
	Safety standard	IEC 62109 - 1 / 2, IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 60255	
	Grid standards	VDE V 0124 - 100, V 0126 - 1 - 1, VDE - AR - N 4105, CEI 0 - 21/ CEI 0 - 16, UNE 206 007 - 1, EN 50549, G98 / G99, EN 50530	

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