

## Grid Tied Solar String Inverters

HIVERTER-Si-N Series  
25 kW to 50 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
- 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
- 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

## Technical Specifications

Solar String Inverter – 25 kW to 50 kW (3Ph.)

HIVERTER-Si-N Series Three Phase with Three / Four MPPT		Si-25K-N	Si-30K-N	Si-33K-N	Si-36K-N	Si-40K-N	Si-45K-N	Si-50K-N	
Input (DC)	Recommended PV input power	37.5 kWp	45 kWp	49.5 kWp	54 kWp	60 kWp	67.5 kWp	75 kWp	
	Max DC power for single MPPT	25 kWp							
	Number of independent MPPT	3	3	3	3	4	4	4	
	Number of DC inputs	6	6	6	6	8	8	8	
	Max. input voltage	1100 V							
	Start-up input voltage	200 V							
	Rated input voltage	620 V							
	MPPT operating voltage range	180 - 1000 V							
	Full power MPPT voltage range	480 V - 850 V	480 V - 850 V	510 V - 850 V	540 V - 850 V	480 V - 850 V	510 V - 850 V	540 V - 850 V	
	Max. input current per MPPT	3 x 40				4 x 40			
	Maximum DC input short circuit current per MPPT	3 x 50				4 x 50			
Output (AC)	Rated power	25 kW	30 kW	33 kW	36 kW	40 kW	45 kW	50 kW	
	Max. AC power	28 kVA	34 kVA	37 kVA	40 kVA	44 kVA	49.5 kVA	55 kVA	
	Max. output current	42.4 A	51.5 A	56 A	60.6 A	66.7 A	75 A	83.3 A	
	Nominal grid voltage	3 / N / PE , 230 / 400 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	98.60%				98.80%			
	European weighted efficiency up to	98.20%							
	Self-consumption at night	<3W							
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							
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	<60 dB							
	Weight	36 kg				37 kg			
	Cooling	Fan							
	Dimension	585*480*220 mm							
	Display	LCD & Bluetooth + APP							
Standard	Standard warranty	5 years (Optional: 7 & 10 years)							
	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	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, EN 50530, NB / T32004								

### Hitachi Hi-Rel Power Electronics Private Limited

Registered Office: B-52, Corporate House, Near Judges Bungalow, Bodakdev, Ahmedabad-380054, Gujarat, India.

Manufacturing Works: Plot No. SM 3 & 4, Sanand GIDC II, Industrial Estate, Bol Village, Sanand-382 110, Gujarat, India.

Authorized distributor: Loop Solar | www.loopsolar.com | info@loopsolar.com | +91-9971136369



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