

HITACHI

Product Portfolio

Grid Tied Solar String Inverters

HIVERTER-Si-N Series - 110 kW & 125 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
- 10 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99%
- Wide operating temperature range from -30°C to 60°C
- IP66 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 Wi-Fi



Applicable IEC Standards

No.	IEC Standard Description	IEC Certificate No
1	Environmental Testing	IEC 60068-2-1:2007 IEC 60068-2-2:2007 IEC 60068-2-14:2009 IEC 60068-2-30:2014
2	Efficiency Measurement	IEC 61683: 1999
3	Product Safety Standard	IEC 62109-1:2010 IEC 62109-2:2011
4	Grid Connectivity Standard / Utility Interface	IEC 61727: 2004
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116: 2014
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-2: 2019 IEC 61000-6-4: 2019

Technical Specifications

Solar String Inverter – 110 kVA & 125 kVA (3Ph.)

Hiverter Si-N Series Three Phase, 10 MPPT	Si-110K-N	Si-125K-N
Input (DC)		
Recommended PV input power	150 kWp	165 kWp
Max. input voltage	1100 V	
Rated input voltage	625 V	
Start-up voltage	200 V	
MPPT operating voltage range	180 V - 1000 V	
Full power MPPT voltage range	500V - 850V	
Number of MPP trackers	10	
Number for DC inputs	20	
Max. current per MPPT	10 x 40A	
Max. input short circuit current	10 x 50A	
Output (AC)		
AC output power	110 kVA @ 45°C / 100 kVA @ 50°C	125 kVA @ 45°C / 110 kVA @ 50°C
Max. output current	167.2 A@380 V / 159.5 A@400 V / 153.1 A@415 V	190 A@380 V / 181.2 A@400 V / 174 A@415 V
Rated grid voltage	3 / N / PE, 380 V / 400 V / 415 V	
Grid voltage range*	310 - 480 Vac	
Nominal frequency	50 / 60 Hz	
Grid frequency range	45~55 Hz / 55~65 Hz	
Active power adjustable range	0~100%	
THDi	< 1%(@100% P)	
Power factor	1 default (adjustable ± 0.8)	
Efficiency		
Max. Efficiency up to	98.60%	
European weighted efficiency up to	98.30%	
Protection		
DC reverse polarity protection	Yes	
Anti-islanding Protection	Yes	
Leakage Current protection	Yes	
Ground Fault monitoring	Yes	
PV-array string fault monitoring	Yes	
DC Switch	Yes	
PID recovery	Yes	
AFCI	Yes	
SPD protection	PV: type II standard, AC: type II standard	
Communication		
Standard Communication mode	RS 485, WiFi	
General Data		
Ambient temperature range	-30°C ~ +60°C	
Topology	Transformer less	
Degree of protection	IP 66	
Allowable relative humidity range	0 - 100%	
Max. operating altitude	4000 m (> 3000 m derating)	
Weight	75 kg	
Cooling	Smart forced air cooling	
Dimension (mm)	970 x 695 x 325 mm	
Display	LCD & Bluetooth + APP	

*AC Over Voltage and Under Voltage protection is as per CEA guidelines & set by default as per CEA guideline. Mentioned range is for global level.

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