

# HITACHI

## Product Portfolio

## Grid Tied Solar String Inverters

HIVERTER-Si-N Series - 80 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
- 6 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 - 80 kW (3Ph.)

Hiverter Si-N Series Three Phase with Six MPPT	Si-80K-N
<b>Input (DC)</b>	
Recommended PV input power	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 40 A
Max. DC input short circuit current per MPPT	6 x 60 A
<b>Output (AC)</b>	
Rated power	80 kW
Max. AC power	88 kVA
Max. output current	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)
<b>Performance</b>	
Max. Efficiency up to	98.70%
European weighted efficiency up to	98.20%
Self-consumption at night	<2W
<b>Protection</b>	
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
<b>Communication</b>	
Standard Communication mode	RS 485 / Bluetooth (Optional: WIFI / Ethernet)
<b>General Data</b>	
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
Weight	50 kg
Cooling	Fan
Dimension (mm)	687*561*275 mm
Display	LCD, App via Bluetooth
Standard Warranty	5 years (Optional: 7 & 10 years)

\*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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