

Grid Tied Solar String Inverters

250 kW to 255 kW (3Ph.)

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
- 12 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- 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 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 IEC 61000-3-11 IEC 61000-3-12

Technical Specifications

Solar String Inverter - 250 kW to 255 kW (3Ph.)

Hivertor Si Series Three Phase		Si-250K-HV	Si-255K-HV
Input (DC)	Max. input voltage	1500V	
	Rated input voltage	1160V	
	Start-up voltage	550V	
	MPPT operating voltage range	500V- 1500V	
	Full power MPPT voltage range	800V-1300V	
	Number of MPP trackers	12	
	Number for DC inputs	24	
	Max. input current per MPPT	30A x 12	
	Max. input short circuit current per MPPT	50A x 12	
Output (AC)	AC output power	250kVA@30°C / 235kVA@40°C / 220kVA@50°C	255kVA@30°C / 235kVA@40°C / 220kVA@50°C
	Max. output current	180.5A	184A
	Nominal grid voltage	3/PE, 800Vac	
	Grid voltage range	640Vac-920VVac	
	Nominal frequency	50/60Hz	
	Grid frequency range	45~55Hz / 55~ 65Hz (According to local standard)	
	Active power adjustable range	0-100%	
	TH Di	<3%	
	Power factor	1 default (adjustable± 0.8)	
Performance	Max. Efficiency	99.02%	
	European weighted efficiency up to	98.70%	
Protection	DC reverse polarity protection	Yes	
	Anti-islanding protection	Yes	
	Leakage current protection	Yes	
	Ground fault monitoring	Yes	
	PV-array string fault monitoring	Yes	
	Zero voltage ride through	Yes	
	DC switch	Yes	
	Anti-PID protection	Optional	
	AFCI	Optional	
	Protection class/Overvoltage category	I/III	
	Input/Output SPD	PV: type II standard, AC: type II standard	
Communication	Communication	RS485 /USB /Bluetooth, Optional: WiFi /GPRS /PLC	
General Data	Ambient temperature range	-30°C ~ +60°C	
	Self-consumption at night	<2W	
	Topology	Transformer less	
	Degree of protection	IP66	
	Allowable relative humidity range	0-100%	
	Max. operating altitude	4000m	
	Noise	≤ 60 Db	
	Weight	99kg	
	Cooling	Smart forced air cooling	
	Dimension (L*W*H)	1100.5 x 713.5 x 368mm	
	Display	LCD & Bluetooth + APP	
Standard	EMC	IEC 61000-6-2, IEC 61000-6-4, IEC 61000-3-11, IEC 61000-3-12	
	Safety standard	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068 (1,2,14,30)	

Hitachi Hi-Rel Power Electronics Private Limited

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

Tel: +91-79-6604 6200, Fax: +91-79-6604 6243

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

Tel: +91-2717-678 777, Fax: +91-2717-678 700

Gandhinagar Facility: B-14/1 & 171, GIDC Electronics Zone, Sector - 25, Gandhinagar - 382 028, Gujarat, India.

Tel: +91-79-6170 0500

Helpline No.: (080) 6112 0800 (For Sales & Service Support) contact@hitachi-hirel.com www.hitachi-hirel.com

In the spirit of innovation, specifications and features are subject to change without notice.



e-gallery

[f](https://www.facebook.com/hitachihirel) /hitachihirel

[in](https://www.linkedin.com/company/hitachihirel) /company/hitachihirel

[yt](https://www.youtube.com/channel/UC...) /hitachihirelindia