

HIVERTER-Si-100K

Three Phase, Multi-MPPT
Grid Tied Solar String Inverter

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 99.9%
- 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

Technical Specifications

Input (DC)		Si-100K
Max. input voltage		1100V
Rated input voltage		625V
Start-up voltage		200V
MPPT operating voltage range		180V-1000V
Full power MPPT voltage range		500V-850V
Number of MPP trackers		10
Number for DC inputs		20
Max. input current per MPPT		26A
Max. input short circuit current per MPPT		40A
Output (AC)		
Rated power		100kW
Max. AC power		110kVA
Max. output current		160A
Nominal grid voltage		3/N/PE, 230V/400Vac, 220V/380Vac
Grid voltage range		310Vac-480Vac
Nominal frequency		50/60Hz
Grid frequency range		45Hz-55Hz/54Hz-66Hz (According to local standard)
Active power adjustable range		0-100%
TH Di		<3%
Power factor		1 default (adjustable ± 0.8)
Performance		
Max. Efficiency up to		98.70%
European weighted efficiency up to		98.30%
MPPT efficiency		>99.9%
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/Overtvoltage category		I/III
Input/Output SPD		PV: type II standard, AC: type II standard
Communication		
Power management unit		According to certification and request
Communication		RS485, Optional: Wi-Fi /GPRS /PLC
Operation data storage		25 years
General Data		
Ambient temperature range		-30°C ~ +60°C
Topology		Transformer less
Degree of protection		IP66
Allowable relative humidity range		0-100%
Max. operating altitude		4000m
Noise		≤ 60 Db
Weight		90kg
Cooling		Smart forced air cooling
Dimension (mm)		995.5 x 663.5 x 368
Display		LCD & Bluetooth + APP
Standard		
EMC		EN 61000-6-2, EN 61000-6-4
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)

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