

HIVERTER-Si-1.6K-H3

Single Phase, Single-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
- Up to 3 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from 20°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 III 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 IEEE1547 IEEE1547.1
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-1 IEC 61000-6-3 IEC 61000-3-2 IEC 61000-3-3

Technical Specifications

Input (DC)		Si-1.6K-H3
Recommended PV input power		2200W
Max. input voltage		500V
Aux. Open voltage		60V
Start-up input voltage		70V
Rated input voltage		360V
MPPT voltage range		50-500V
Full load DC voltage range		150V-450V
Max. input MPPT current		12A
Max. DC input short circuit current per MPPT		15A
Number of MPPT/String per MPPT		1/1
Input terminal type		MC4 / H4
Output (AC)		
Rated power		1600W
Max. AC power		1600VA
Rated output current		7A
Max. output current		7.7A
Nominal grid voltage		L/N/PE, 220Vac, 230Vac, 240Vac
Grid voltage range		180Vac-276Vac (According to local standard)
Nominal frequency		50/60Hz
Grid frequency range		45~55Hz/54~66Hz (According to local standard)
THDi		<3%
Power factor		1 default (adjustable ± 0.8)
Efficiency up to		
Max. Efficiency up to		97.51%
European weighted efficiency		96.9%
MPPT adaptation efficiency		>99.9%
Protection		
Anti-Islanding protection		Yes
DC reverse polarity protection		Yes
Over temp protection		Yes
Leakage current protection		Yes
Over voltage protection		Yes
Over current protection		Yes
Earth fault protection		Yes
SPD		MOV: Type III standard
Communication		
Standard Communication mode		Rs485, Wi-Fi/GPRS/Ethernet(optional), USB
Operation data storage		25 years
General Data		
Topology		Transformer less
Ambient temperature range		-30°C ~ +60°C
Allowable relative humidity range		0~100%
Noise		<25dB
DC switch		Optional
Cooling		Natural convection
Max. operating altitude		2000m
Dimension (mm)		303 x 260.5 x 118
Support bracket		Wall-mounted
Weight		5.5kg
Display		LCD+LED
Degree of protection		IP65
Standard		
EMC		EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4,
Safety standard		IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 62109-1/2
Grid standards		AS 4777, VDE V 0124-100, VDE V 0126-1-1, VDE-AR-N 4105, EN 50438, G83/2, C10/11, RD 1699

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