

## 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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