

## HIVERTER-Si-4.6K-H2

Single Phase, Dual-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-4.6K-H2
Recommended PV input power		5000W
Max DC power for single MPPT		3000W
Number of independent MPPT		2
Number of DC inputs		1/1
Max. Input voltage		600V
Start-up input voltage		120V
Rated input voltage		360V
MPPT voltage range		90-580V
Full load DC voltage range		230V-520V
Max. Input current per MPPT		11A/11A
Max. DC input short circuit current per MPPT		13.2A
Output (AC)		
Rated power		4600W
Max. AC power		4600VA
Max. output current		21A
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)
Active power adjustable range		0~100%
THDi		<3%
Power factor		1 default (adjustable ±0.8)
Power limit export		Zero export or adjustable power limit export
Performance		
Max. Efficiency up to		97.43%
European weighted efficiency up to		97.6%
Self-consumption at night		<1W
Feed-in start power		50W
MPPT efficiency		>99.9%
Protection		
DC reverse polarity protection		Yes
DC switch		Optional
Protection class/overvoltage category		I/III
Input/output MOV (II)		Yes
Safety protection		Anti islanding, RCMU, Ground fault monitoring
SPD		MOV: Type III standard
Communication		
Power management unit		According to certification and request
Standard Communication mode		Rs485, Wi-Fi / Ethernet / GPRS(optional), SD card(optional)
Operation data storage		25 years
General Data		
Ambient temperature range		-25°C ~ +60°C
Topology		Transformer less
Degree of protection		IP65
Allowable relative humidity range		0~100%
Max. operating altitude		2000m
Noise		<25dB
Weight		11.5kg
Cooling		Natural convection
Dimension (mm)		405 x 315 x 135
Display		LCD display
Standard		
EMC		EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)
Grid standards		AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21, EN50438/EN50549, G83/G59/G98/G99, NB/T32004; ABNT NBR 16149/16150

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