

## HIVERTER-Si-2.7K-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/<br>Utility Interface  | IEC 61727  |
| 5   | Test Procedure for Islanding<br>Prevention Measures for<br>Utility Interconnected<br>PV Inverters | IEC 62116<br>IEEE1547<br>IEEE1547.1                              |
| 6   | Electromagnet Compatibility<br>& Electro Magnet Interference                                      | IEC 61000-6-1<br>IEC 61000-6-3<br>IEC 61000-3-2<br>IEC 61000-3-3 |

## Technical Specifications

| Input (DC)                                   |  | Si-2.7K-H3   |
|--|--|--|
| Recommended PV input power                   |  | 3700W  |
| Max. input voltage                           |  | 500V   |
| Aux. Open voltage                            |  | 60V  |
| Start-up input voltage                       |  | 70V  |
| Rated input voltage                          |  | 360V   |
| MPPT voltage range                           |  | 50-550V  |
| Full load DC voltage range                   |  | 250V-500V  |
| 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                                  |  | 2700W  |
| Max. AC power                                |  | 2700VA   |
| Rated output current                         |  | 11.8A  |
| Max. output current                          |  | 13A  |
| 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                        |  | 97.38%   |
| European weighted efficiency                 |  | 97.2%  |
| 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)                               |  | 321 x 260.5 x 131.5  |
| Support bracket                              |  | Wall-mounted   |
| Weight                                       |  | 6.3kg  |
| 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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