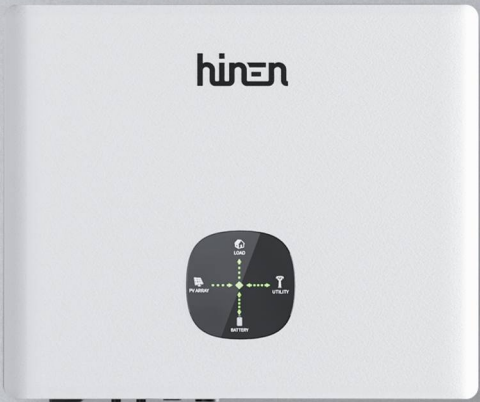


# H5000-EU

## 5kW Single-phase Hybrid Inverter

3kW/3.6kW/4kW/4.6kW/  
5kW/6kW



- 190% Oversized PV input, Max 11.4 kW
- Integrated die-casting, waterproof connector design, IP65 dustproof & waterproof, no weather restrictions
- All-round Inverter Protection :
  - 1.PV disconnection protection
  - 2.Ground fault protection
  - 3.DC bus protection
  - 4.Type II DC SPD & Type III AC SPD
- Max. MPPT current reaching 16A for a single PV string
- 120A Lightning-fast charge & discharge ( Continuous )
- Fanless design, sleep-level ultra quiet, running sound ≤ 25dB
- Backup switch time ≤ 20ms

## Technical Specification

| Model                                                               | H3000-EU  | H3600-EU | H4000-EU | H4600-EU | H5000-EU | H6000-EU |
|---------------------------------------------------------------------|-----------|----------|----------|----------|----------|----------|
| PV Input Specification                                              |           |          |          |          |          |          |
| Max. PV input power(W)                                              | 6000      | 7200     | 8000     | 9200     | 10000    | 11400    |
| Max. PV voltage(VDC)                                                | 550       | 550      | 550      | 550      | 550      | 550      |
| Nominal voltage(VDC)                                                | 360       | 360      | 360      | 360      | 360      | 360      |
| Startup voltage(VDC)                                                | 90        | 90       | 90       | 90       | 90       | 90       |
| Minimum operating voltage(VDC)                                      | 90        | 90       | 90       | 90       | 90       | 90       |
| MPPT work voltage range(VDC)                                        | 90~550    | 90~550   | 90~550   | 90~550   | 90~550   | 90~550   |
| MPPT voltage range (full load, VDC)                                 | 130~480   | 130~480  | 140~480  | 155~480  | 165~480  | 200~480  |
| Number of MPPT                                                      | 2         | 2        | 2        | 2        | 2        | 2        |
| Number of strings per MPPT                                          | 1         | 1        | 1        | 1        | 1        | 1        |
| Max. short-circuit current per MPPT                                 | 20/20     | 20/20    | 20/20    | 20/20    | 20/20    | 20/20    |
| Max. input current per MPPT (A)                                     | 16/16     | 16/16    | 16/16    | 16/16    | 16/16    | 16/16    |
| Backfeed current to the array(A)                                    | 0         | 0        | 0        | 0        | 0        | 0        |
| Battery Specification(Compatible with LiFePO4 battery or Lead acid) |           |          |          |          |          |          |
| Battery voltage range (VDC)                                         | 42/58     | 42/58    | 42/58    | 42/58    | 42/58    | 42/58    |
| Nominal voltage(VDC)                                                | 50        | 50       | 50       | 50       | 50       | 50       |
| Min. full load voltage (VDC)                                        | 45        | 45       | 45       | 45       | 45       | 45       |
| Max. charge/discharge current(A)                                    | 66.7/66.7 | 80/80    | 87/87    | 100/100  | 100/100  | 120/120  |
| Max. continuous charge/discharge power(W)                           | 3000      | 3600     | 4000     | 4600     | 5000     | 6000     |
| Compatible battery mode                                             | 6         | 6        | 6        | 6        | 6        | 6        |
| Grid Port Specification                                             |           |          |          |          |          |          |
| Nominal voltage(VAC)                                                | 230       |          |          |          |          |          |
| Nominal frequency(Hz)                                               | 50/60     |          |          |          |          |          |
| Rated output power(W)                                               | 3000      | 3680     | 4000     | 4600     | 5000     | 6000     |
| Rated output apparent power(VA)                                     | 3000      | 3680     | 4000     | 4600     | 5000     | 6000     |
| Max. output apparent power(VA)                                      | 3000      | 3680     | 4000     | 4600     | 5000     | 6000     |
| Rated output current(A)                                             | 13        | 16       | 17.4     | 20       | 21.7     | 26       |

Technical Specification

| Model                                     | H3000-EU        | H3600-EU        | H4000-EU        | H4600-EU        | H5000-EU        | H6000-EU        |
|-------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Max. output current(A)                    | 20              | 20              | 24              | 24              | 27              | 27              |
| Max. input power(W)                       | 4500            | 5520            | 6000            | 6900            | 7500            | 9000            |
| Max.input apparent power (VA)             | 4500            | 5520            | 6000            | 6900            | 7500            | 9000            |
| Max. input current(A)                     | 24              | 24              | 33              | 33              | 39              | 39              |
| Maximum output fault peak current(A)      | 75 (50us)       | 75 (50us)       | 75 (50us)       | 75 (50us)       | 75 (50us)       | 75 (50us)       |
| Maximum output over current protection(A) | 65              | 65              | 65              | 65              | 65              | 65              |
| Power factor range                        | 0.8 cap~0.8 ind | 0.8 cap~0.8 ind | 0.8 cap~0.8 ind | 0.8 cap~0.8 ind | 0.8 cap~0.8 ind | 0.8 cap~0.8 ind |
| Backup Port Specification                 |                 |                 |                 |                 |                 |                 |
| Nominal voltage(VAC)                      | 230             |                 |                 |                 |                 |                 |
| Nominal frequency(Hz)                     | 50/60           |                 |                 |                 |                 |                 |
| Rated output power(W)                     | 3000            | 3680            | 4000            | 4600            | 5000            | 6000            |
| Rated output apparent power(VA)           | 3000            | 3680            | 4000            | 4600            | 5000            | 6000            |
| Max. output apparent power(VA)            | 3000            | 3680            | 4000            | 4600            | 5000            | 6000            |
| Rated output current(A)                   | 13              | 16              | 17.4            | 20              | 21.7            | 26              |
| Max. output current(A)                    | 20              | 20              | 24              | 24              | 27              | 27              |
| Efficiency                                |                 |                 |                 |                 |                 |                 |
| MAX. efficiency(%)                        | 97.00           | 97.00           | 97.10           | 97.10           | 97.20           | 97.20           |
| MPPT efficiency(%)                        | ≥99.5           |                 |                 |                 |                 |                 |
| Protection & Function                     |                 |                 |                 |                 |                 |                 |
| DC switch                                 | Yes             |                 |                 |                 |                 |                 |
| DC reverse polarity protection            | Yes             |                 |                 |                 |                 |                 |
| AC/DC surge protection                    | Yes             |                 |                 |                 |                 |                 |
| Battery reverse protection                | Yes             |                 |                 |                 |                 |                 |
| AC short-circuit protection               | Yes             |                 |                 |                 |                 |                 |
| Ground fault monitoring                   | Yes             |                 |                 |                 |                 |                 |
| Grid monitoring                           | Yes             |                 |                 |                 |                 |                 |

Technical Specification

| Model                            | H3000-EU                                                                                                                                                                                                                                                                                                           | H3600-EU | H4000-EU | H4600-EU | H5000-EU | H6000-EU |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|
| Anti-islanding protection        | Yes (refer to IEC-62116)                                                                                                                                                                                                                                                                                           |          |          |          |          |          |
| Residual-current monitoring unit | Yes                                                                                                                                                                                                                                                                                                                |          |          |          |          |          |
| Insulation resistance monitoring | Yes                                                                                                                                                                                                                                                                                                                |          |          |          |          |          |
| Overvoltage class                | OVC III[AC], OVC II[PV]                                                                                                                                                                                                                                                                                            |          |          |          |          |          |
| General information              |                                                                                                                                                                                                                                                                                                                    |          |          |          |          |          |
| Ingress protection               | IP65                                                                                                                                                                                                                                                                                                               |          |          |          |          |          |
| Operation ambient temperature(℃) | -25~60, derating above 45                                                                                                                                                                                                                                                                                          |          |          |          |          |          |
| Altitude(m)                      | <4000                                                                                                                                                                                                                                                                                                              |          |          |          |          |          |
| Relative humidity(%)             | 0~100                                                                                                                                                                                                                                                                                                              |          |          |          |          |          |
| Dimensions [W*H*D](mm)           | 568*472*188                                                                                                                                                                                                                                                                                                        |          |          |          |          |          |
| Weight(kg)                       | ≈29.6                                                                                                                                                                                                                                                                                                              |          |          |          |          |          |
| Noise(dB)                        | ≤25                                                                                                                                                                                                                                                                                                                |          |          |          |          |          |
| Protective Class                 | Class I                                                                                                                                                                                                                                                                                                            |          |          |          |          |          |
| Monitor                          | WIFI/GPRS                                                                                                                                                                                                                                                                                                          |          |          |          |          |          |
| Isolated topology                | PV to AC non-isolated, battery to PV/AC high frequency isolated                                                                                                                                                                                                                                                    |          |          |          |          |          |
| Warranty*                        | 10 Years                                                                                                                                                                                                                                                                                                           |          |          |          |          |          |
| Communication                    | Wi-Fi/Demand Response(DR) Controllable                                                                                                                                                                                                                                                                             |          |          |          |          |          |
| Certification & Standard         |                                                                                                                                                                                                                                                                                                                    |          |          |          |          |          |
| Grid code                        | VDE-AR-N 4105, VDE V 0124-100, AS/NZS 4777.2, NC RfG:2016, PSE:2018, PTPIREE:2021, VDE 0126-1-1, EN 50549-1 and grid codeof DK, NL, FI, CEI 0-21,G98, G99,UNE 217001-2020, UNE 217002-2020, NTS SEPE:2021 (Type A), RD 1699:2011, NRS 097-2-1, IEC 61727, IEC 62116, TOR Type A/B:2022, OVE R25:2020, C10/C11:2021 |          |          |          |          |          |
| Safety                           | IEC/EN IEC/BS EN62109-1:2010, IEC/EN/BS EN62109-2:2011, AS 60947-3:2018, IP65                                                                                                                                                                                                                                      |          |          |          |          |          |
| EMC                              | IEC/EN IEC/BS EN IEC 61000-6-1, IEC/EN/BS EN IEC 61000-6-3, IEC61000-2-2 & CISPR11                                                                                                                                                                                                                                 |          |          |          |          |          |

Warranty\*: Refer to the product warranty terms for details