

Single-phase  
Hybrid Inverter  
HI-8~12K-SL



-  Equipped with GEN port, compatible with diesel generators, smart loads, and AC coupling.
-  Color touch screen (4.3/7" optional).
-  Integrated 0-export function.
-  Compatibility with lead-acid and Li-ion batteries, supports various brands of lithium batteries.
-  Supports PV array input up to 160% of rated inverter power.
-  Low startup voltage threshold, wide operating voltage range.

| Technical Data                                | HI-8K-SL                                                                                                                                                              | HI-10K-SL   | HI-12K-SL   |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
| Input DC (PV side)                            |                                                                                                                                                                       |             |             |
| Max. PV access power                          | 16kW                                                                                                                                                                  | 20kW        | 24kW        |
| Max. PV input power                           | 12.8kW                                                                                                                                                                | 16kW        | 19.2kW      |
| Max. PV input voltage                         | 600V                                                                                                                                                                  |             |             |
| Nominal input voltage                         | 360V                                                                                                                                                                  |             |             |
| MPPT working voltage range                    | 80V-500V                                                                                                                                                              |             |             |
| Number of independent MPPT / strings per MPPT | 4/1                                                                                                                                                                   |             |             |
| MPPT max. current                             | 4*20A                                                                                                                                                                 |             |             |
| Start-up voltage                              | 100V                                                                                                                                                                  |             |             |
| Output/Input AC (Grid side)                   |                                                                                                                                                                       |             |             |
| Nominal apparent power                        | 8kW                                                                                                                                                                   | 10kW        | 12kW        |
| Max. apparent power                           | 8.8kVA                                                                                                                                                                | 11kVA       | 13.2kVA     |
| Nominal voltage                               | 220V/230V                                                                                                                                                             |             |             |
| Nominal frequency                             | 50Hz/60Hz                                                                                                                                                             |             |             |
| Rated current                                 | 36.4A/34.7A                                                                                                                                                           | 45.5A/43.4A | 54.5A/52.2A |
| Max. current                                  | 40A                                                                                                                                                                   | 50A         | 60A         |
| Power factor                                  | -0.8~+0.8(adjustable)                                                                                                                                                 |             |             |
| THDi                                          | <3%(Nominal Output)                                                                                                                                                   |             |             |
| Grid system pattern                           | L+N+PE                                                                                                                                                                |             |             |
| Max. AC current from utility grid             | 100A                                                                                                                                                                  |             |             |
| Output AC (Back-up)                           |                                                                                                                                                                       |             |             |
| Nominal output power                          | 8kW                                                                                                                                                                   | 10kW        | 12kW        |
| Max. output apparent power                    | 8.8kVA                                                                                                                                                                | 11kVA       | 13.2kVA     |
| Nominal output voltage                        | 220V/230V                                                                                                                                                             |             |             |
| Nominal ouput frequency                       | 50Hz/60Hz                                                                                                                                                             |             |             |
| Output THDV                                   | <3%                                                                                                                                                                   |             |             |
| Automatic switch time                         | <10ms                                                                                                                                                                 |             |             |
| Battery                                       |                                                                                                                                                                       |             |             |
| Battery type                                  | Li-Ion/Lead-acid                                                                                                                                                      |             |             |
| Battery voltage range                         | 40V-60V                                                                                                                                                               |             |             |
| Max. charging/discharging current             | 190A                                                                                                                                                                  | 210A        | 240A        |
| Charging strategy for Li-Ion battery          | Self-adaption to BMS                                                                                                                                                  |             |             |
| Charging strategy for Lead-acid battery       | Three-stage                                                                                                                                                           |             |             |
| Efficiency                                    |                                                                                                                                                                       |             |             |
| Max. MPPT efficiency                          | 99.9%                                                                                                                                                                 |             |             |
| Europe efficiency                             | 97.5%                                                                                                                                                                 |             |             |
| Max. battery to load efficiency               | 94.5%                                                                                                                                                                 |             |             |
| Protection                                    |                                                                                                                                                                       |             |             |
| Anti islanding protection                     | Yes                                                                                                                                                                   |             |             |
| Insulation impedance protection               | Yes                                                                                                                                                                   |             |             |
| RCD detection                                 | Yes                                                                                                                                                                   |             |             |
| PV reverse polarity protection                | Yes                                                                                                                                                                   |             |             |
| Output over voltage protection                | Yes                                                                                                                                                                   |             |             |
| Output over current protection                | Yes                                                                                                                                                                   |             |             |
| General Data                                  |                                                                                                                                                                       |             |             |
| Dimensions(L/W/H)in mm                        | 425/290/660                                                                                                                                                           |             |             |
| Weight                                        | 39kg                                                                                                                                                                  |             |             |
| Operation temperature range                   | -25°C~+60°C                                                                                                                                                           |             |             |
| Heat dissipation mode                         | Smart cooling                                                                                                                                                         |             |             |
| IP Class                                      | IP 66                                                                                                                                                                 |             |             |
| Maximum altitude                              | 4000m                                                                                                                                                                 |             |             |
| Self-Consumption night                        | <3w                                                                                                                                                                   |             |             |
| Topology                                      | Transformerless                                                                                                                                                       |             |             |
| Features                                      |                                                                                                                                                                       |             |             |
| LCD display                                   | Yes                                                                                                                                                                   |             |             |
| Communication interface                       | WiFi/4G/USB/CAN/RS485                                                                                                                                                 |             |             |
| Standards                                     | EN 62109/EN 62477/EN IEC 61000/CEI 0-21/NTS-631/RD647/UNE 217001<br>UNE 217002/VDE 4105/IEC 61727/IEC 62116/IEC 61683/EN 50549/G98<br>G99/NRS 097/UTE C 15/VDE V 0126 |             |             |