

## Energy Storage Inverters

# S6-EH1P(8-10)K-L-PLUS

Single Phase | Low Voltage



### Smart Energy Management

- AI intelligently manages charging and discharging based on TOU (Time-of-Use) tariffs
- Seamless integration with VPP and EMS platforms for enhanced energy optimization



### High Performance

- 160% PV input capacity to maximize solar energy utilization
- Switching time < 10ms



### Flexible & Scalable

- Compatible with mainstream lithium and lead-acid batteries
- Easily expand system capacity using parallel connections and AC coupling



### Simple & Fast Configuration

- 7-inch large screen uses U.S.-made ZEITLER industrial-grade components
- Bluetooth app support for quick and easy setup

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# DATASHEET

## S6-EH1P(8-10)K-L-PLUS

| Models                                   | 8K                                                                                                               | 10K                                                 |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Input DC (PV side)                       |                                                                                                                  |                                                     |
| Recommended max. PV array size           | 16 kW                                                                                                            | 20 kW                                               |
| Max. usable PV input power               | 12.8 kW                                                                                                          | 16 kW                                               |
| Max. input voltage                       |                                                                                                                  | 500 V                                               |
| Rated voltage                            |                                                                                                                  | 330 V                                               |
| Start-up voltage                         |                                                                                                                  | 90 V                                                |
| MPPT voltage range                       |                                                                                                                  | 90 - 435 V                                          |
| Max. input current                       | 32 A / 32 A                                                                                                      | 42 A / 42 A                                         |
| Max. short circuit current               | 40 A / 40 A                                                                                                      | 48 A / 48 A                                         |
| MPPT number / Max. input strings number  |                                                                                                                  | 2 / 4                                               |
| Battery                                  |                                                                                                                  |                                                     |
| Battery type                             |                                                                                                                  | Li-ion / Lead-acid                                  |
| Battery voltage range                    |                                                                                                                  | 40 - 60 V                                           |
| Max. charge / discharge power            | 8 kW                                                                                                             | 10 kW                                               |
| Max. charge / discharge current          | 190 A                                                                                                            | 208 A                                               |
| Communication                            |                                                                                                                  | CAN / RS485                                         |
| Output AC (Grid side)                    |                                                                                                                  |                                                     |
| Rated output power                       | 8 kW                                                                                                             | 10 kW                                               |
| Max. apparent output power               | 8 kVA                                                                                                            | 10 kVA                                              |
| Operation phase                          |                                                                                                                  | L/N/PE                                              |
| Rated grid voltage                       |                                                                                                                  | 220 V / 230 V                                       |
| Rated grid frequency                     |                                                                                                                  | 50 Hz / 60 Hz                                       |
| Rated grid output current                | 36.4 A / 34.8 A                                                                                                  | 45.5 A / 43.5 A                                     |
| Max. output current                      | 36.4 A / 34.8 A                                                                                                  | 45.5 A / 43.5 A                                     |
| Power factor                             |                                                                                                                  | > 0.99 (0.8 leading - 0.8 lagging)                  |
| THDi                                     |                                                                                                                  | < 3%                                                |
| Input AC (Grid side)                     |                                                                                                                  |                                                     |
| Input voltage range                      |                                                                                                                  | 187 - 253 V                                         |
| Max. input current                       | 50 A                                                                                                             | 65 A                                                |
| Frequency range                          |                                                                                                                  | 45 - 55 Hz / 55 - 65 Hz                             |
| Output AC (Back-up)                      |                                                                                                                  |                                                     |
| Rated output power                       | 8 kW                                                                                                             | 10 kW                                               |
| Max. apparent output power               |                                                                                                                  | 2 times of rated power, 10 s                        |
| Back-up switch time                      |                                                                                                                  | < 10 ms                                             |
| Rated output voltage                     |                                                                                                                  | L/N/PE, 220 V / 230 V                               |
| Rated frequency                          |                                                                                                                  | 50 Hz / 60 Hz                                       |
| Rated output current                     | 36.4 A / 34.8 A                                                                                                  | 45.5 A / 43.5 A                                     |
| Max. AC passthrough current              | 50 A                                                                                                             | 65 A                                                |
| THDv (@linear load)                      |                                                                                                                  | < 2%                                                |
| Input Generator                          |                                                                                                                  |                                                     |
| Max. input power                         | 8 kW                                                                                                             | 10 kW                                               |
| Max. input current                       | 36.4 A / 34.8 A                                                                                                  | 45.5 A / 43.5 A                                     |
| Rated input frequency                    |                                                                                                                  | 50 Hz / 60 Hz                                       |
| Efficiency                               |                                                                                                                  |                                                     |
| Max. efficiency                          |                                                                                                                  | 96.2%                                               |
| EU efficiency                            |                                                                                                                  | 96.1%                                               |
| BAT charged by PV / AC max. efficiency   |                                                                                                                  | 95.3% / 93.9%                                       |
| BAT discharged to AC max. efficiency     |                                                                                                                  | 93.8%                                               |
| Protection                               |                                                                                                                  |                                                     |
| Anti-islanding protection                |                                                                                                                  | Yes                                                 |
| Ground fault monitoring                  |                                                                                                                  | Yes                                                 |
| DC reverse-polarity protection           |                                                                                                                  | Yes                                                 |
| Integrated AFCI 2.0                      |                                                                                                                  | Optional                                            |
| Protection class / Over voltage category |                                                                                                                  | I / II (PV and BAT), III (MAINS and BACKUP and GEN) |
| General Data                             |                                                                                                                  |                                                     |
| Dimensions (W × H × D)                   |                                                                                                                  | 335 × 560 × 253 mm                                  |
| Weight                                   | 23.5 kg                                                                                                          | 24 kg                                               |
| Topology                                 |                                                                                                                  | High frequency isolation (for battery)              |
| Operating ambient temperature range      |                                                                                                                  | -40 ~ +60°C                                         |
| Ingress protection                       |                                                                                                                  | IP66                                                |
| Noise emission (typical)                 |                                                                                                                  | < 65 dB(A)                                          |
| Cooling concept                          |                                                                                                                  | Intelligent fan-cooling                             |
| Max. operation altitude                  |                                                                                                                  | 3000 m                                              |
| Grid connection standard                 | NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, NBR 16149, NBR 16150, G98, CEI 0-21 |                                                     |
| Safety / EMC standard                    | IEC/EN 62109-1/-2, EN 61000-6-2/-3                                                                               |                                                     |
| Features                                 |                                                                                                                  |                                                     |
| DC connection                            | MC4 plug (PV port) / Terminal Block (BAT port)                                                                   |                                                     |
| AC connection                            | Terminal Block                                                                                                   |                                                     |
| Display                                  | 7.0" LCD display & Bluetooth + APP                                                                               |                                                     |
| Communication                            | RS485, CAN, Optional: Wi-Fi, GPRS, LAN                                                                           |                                                     |