



## 80-125K

### Grid-Tied Inverters

## S6-GC(80-125)K

8/10 MPPT | 42A/36A per MPPT



### Safety, Intelligent Prevention

- Integrated meteorological equipment, intelligent system inefficiency warning
- AI-based millisecond arc protection (AFCI)
- Real time PV grounding detection and protection
- Arc fault and RSD (Rapid Shutdown) co-operation for improved fire safety (optional)

### Innovation, Never Stops

- Primary/secondary export power control solution, flexible and fast control, support 10 units in parallel
- Dual independent RS485 ports, perfect adaptation to third-party integration
- Supports single and multiple genset applications without the need for an external genset controller
- The industry's first primary/secondary export power control+ three-phase unbalanced output control, allocate each phase power on demand, and flexibly compatible with various power grids (optional)



## DATASHEET

| Models                                  | 80K                                     | 100K              | 110K              | 125K              | 125K-HV     |
|---|---|-------------------|-------------------|-------------------|-------------|
| <b>Input DC</b>                         |   |                   |                   |                   |             |
| Max. input voltage                      | 1100 V                                  |                   |                   |                   |             |
| Rated voltage                           | 600 V                                   |                   |                   |                   | 720 V       |
| Start-up voltage                        | 180 V                                   |                   |                   |                   |             |
| MPPT voltage range                      | 160 - 1000 V                            |                   |                   |                   |             |
| Max. input current                      | 4 × (42 A / 36 A)                       | 5 × (42 A / 36 A) |                   |                   |             |
| Max. current per DC input               | 4 × (42 A / 36 A)                       | 5 × (42 A / 36 A) |                   |                   |             |
| Max. short circuit current              | 8 × 50 A                                | 10 × 50 A         |                   |                   |             |
| MPPT number / Max. input strings number | 8 / 16                                  | 10 / 20           |                   |                   |             |
| <b>Output AC</b>                        |   |                   |                   |                   |             |
| Rated output power                      | 80 kW                                   | 100 kW            | 110 kW            | 125 kW            | 125kW       |
| Max. apparent output power              | 88 kVA                                  | 110 kVA           | 121 kVA           | 125 kVA           | 137.5 kVA   |
| Max. output power                       | 88 kW                                   | 110 kW            | 121 kW            | 125 kW            | 137.5 kW    |
| Rated grid voltage                      | 3/N/PE, 220 V / 380 V, 230 V / 400 V    |                   |                   |                   | 3/PE, 480 V |
| Rated grid frequency                    | 50 Hz / 60 Hz                           |                   |                   |                   |             |
| Rated grid output current               | 121.6 A / 115.5 A                       | 152.0 A / 144.3 A | 167.1 A / 158.8 A | 189.9 A / 180.4 A | 150.4 A     |
| Max. output current                     | 133.7 A                                 | 167.1 A           | 183.8 A           | 189.9 A           | 165.4 A     |
| Power factor                            | > 0.99 (0.8 leading - 0.8 lagging)      |                   |                   |                   |             |
| THDi                                    | < 3%                                    |                   |                   |                   |             |
| <b>Efficiency</b>                       |   |                   |                   |                   |             |
| Max. efficiency                         | 98.7%                                   |                   |                   |                   |             |
| EU efficiency                           | 98.3%                                   |                   |                   |                   |             |
| <b>Protection</b>                       |   |                   |                   |                   |             |
| DC reverse-polarity protection          | Yes                                     |                   |                   |                   |             |
| Short circuit protection                | Yes                                     |                   |                   |                   |             |
| Output over current protection          | Yes                                     |                   |                   |                   |             |
| Surge protection                        | DC Type II / AC Type II                 |                   |                   |                   |             |
| Grid monitoring                         | Yes                                     |                   |                   |                   |             |
| Anti-islanding protection               | Yes                                     |                   |                   |                   |             |
| Temperature protection                  | Yes                                     |                   |                   |                   |             |
| Strings monitoring                      | Yes                                     |                   |                   |                   |             |
| I/V Curve scanning                      | Yes                                     |                   |                   |                   |             |
| Night SVG function                      | Yes                                     |                   |                   |                   |             |
| Integrated AFCI 2.0                     | Optional                                |                   |                   |                   |             |
| Integrated PID recovery                 | Optional                                |                   |                   |                   |             |
| Integrated DC switch                    | Yes                                     |                   |                   |                   |             |
| Integrated AC switch                    | Optional                                |                   |                   |                   |             |
| Integrated EPM function (< 10 device)   | Optional                                |                   |                   |                   |             |
| <b>General Data</b>                     |   |                   |                   |                   |             |
| Dimensions (W × H × D)                  | 1014 × 567 × 345 mm                     |                   |                   |                   |             |
| Weight                                  | 93 kg                                   | 96 kg             |                   |                   |             |
| Topology                                | Transformerless                         |                   |                   |                   |             |
| Self-consumption (night)                | < 2 W                                   |                   |                   |                   |             |
| Operating ambient temperature range     | -30 ~ +60°C                             |                   |                   |                   |             |
| Relative humidity                       | 0 - 100%                                |                   |                   |                   |             |
| Ingress protection                      | IP66                                    |                   |                   |                   |             |
| Cooling concept                         | Intelligent fan-cooling                 |                   |                   |                   |             |
| Max. operation altitude                 | 4000 m                                  |                   |                   |                   |             |
| Grid connection standard                | G99, IEC61727, EN50549-1/2, VDE4110     |                   |                   |                   |             |
| Safety / EMC standard                   | IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4  |                   |                   |                   |             |
| <b>Features</b>                         |   |                   |                   |                   |             |
| DC connection                           | MC4 connector                           |                   |                   |                   |             |
| AC connection                           | OT terminal (max. 240 mm <sup>2</sup> ) |                   |                   |                   |             |
| Display                                 | LCD                                     |                   |                   |                   |             |
| Communication                           | RS485, Optional: Wi-Fi, GPRS, PLC       |                   |                   |                   |             |