

## S6-GC(25-60)K-US

# Solis Three Phase Grid-Tied Inverters

### Efficient

- Max. efficiency 98.8% (CEC efficiency 98.3%)
- String current up to 20A
- 3/4 MPPT design, supports multiple orientation system design
- Night time PID recovery function, increases overall system yield (optional)
- Wide voltage range and low startup voltage

### Smart

- Equipped with external power control interface, supporting zero output power control
- Intelligent string monitoring, smart I-V curve scan
- Supports RS485, Ethernet, WiFi, Cellular
- Scan to register on SolisCloud, supports remote upgrade and control

### Models:

S6-GC25K-US / S6-GC33K-US

S6-GC36K-US / S6-GC40K-US

S6-GC50K-US / S6-GC60K-US

### Ordering: S6-GC(25-60)K-US

- APST (APS MLRSD Transmitter)
- RSS (Tigo MLRSD Transmitter)
- NEPT (NEP MLRSD Transmitter)

### Safe

- Type 4X, C5 Anti-Corrosion Level
- AFCI protection, proactively reduces fire risk
- Intelligent fan-cooling
- Integrated module level rapid shutdown transmitter
- High quality components from globally recognized suppliers
- Integrated DC and AC disconnects

### Economic

- > 1.5 DC/AC ratio
- Supports high power modules for lower installation costs
- Separable AC wiring box



# DATASHEET

## S6-GC(25-60)K-US

| Models                                  | 25K  | 33K                  | 36K    | 40K                  | 50K                  | 60K    |
|---|--|----------------------|--------|----------------------|----------------------|--------|
| <b>Input DC</b>                         |  |                      |        |                      |                      |        |
| Max. input voltage                      | 1000 V   |                      |        |                      |                      |        |
| Rated voltage                           | 720 V  |                      |        |                      |                      |        |
| Start-up voltage                        | 180 V  |                      |        |                      |                      |        |
| MPPT voltage range                      | 180 - 1000 V   |                      |        |                      |                      |        |
| Max. input current                      | 40 A / 40 A / 40 A   |                      |        |                      | 4 × 40 A             |        |
| Max. short circuit current              | 63 A / 63 A / 63 A   |                      |        |                      | 4 × 63 A             |        |
| MPPT number / Max. input strings number | 3 / 6  |                      |        |                      | 4 / 8                |        |
| <b>Output AC</b>                        |  |                      |        |                      |                      |        |
| Rated output power                      | 25 kW  | 33 kW                | 36 kW  | 40 kW                | 50 kW                | 60 kW  |
| Max. apparent output power              | 25 kVA   | 33 kVA               | 36 kVA | 40 kVA               | 50 kVA               | 60 kVA |
| Max. output power                       | 25 kW  | 33 kW                | 36 kW  | 40 kW                | 50 kW                | 60 kW  |
| Rated grid voltage                      | 3Φ/PE, 480 V   |                      |        |                      |                      |        |
| Rated grid frequency                    | 60 Hz  |                      |        |                      |                      |        |
| Max. output current                     | 30.1 A   | 39.7 A               | 43.3 A | 48.1 A               | 60.1 A               | 72.2 A |
| Power factor                            | > 0.99 (0.8 leading - 0.8 lagging)   |                      |        |                      |                      |        |
| THDi                                    | < 3%   |                      |        |                      |                      |        |
| <b>Efficiency</b>                       |  |                      |        |                      |                      |        |
| Max. efficiency                         | 98.8%  |                      |        |                      |                      |        |
| CEC 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  |                      |        |                      |                      |        |
| Multi peak scan                         | Yes  |                      |        |                      |                      |        |
| Integrated AFCI                         | Yes  |                      |        |                      |                      |        |
| Integrated PID recovery                 | Optional   |                      |        |                      |                      |        |
| Integrated DC switch                    | Yes  |                      |        |                      |                      |        |
| Integrated AC switch                    | Yes  |                      |        |                      |                      |        |
| <b>General Data</b>                     |  |                      |        |                      |                      |        |
| Dimensions (W × H × D)                  | 30.9 × 21.6 × 12.6 in (784 × 549 × 320 mm)   |                      |        |                      |                      |        |
| Weight                                  | 96.3 lbs (43.7 kgs)  | 105.4 lbs (47.8 kgs) |        | 108.7 lbs (49.3 kgs) | 110.5 lbs (50.1 kgs) |        |
| Topology                                | Transformerless  |                      |        |                      |                      |        |
| Self-consumption (night)                | < 1 W  |                      |        |                      |                      |        |
| Relative humidity                       | 0 - 100%   |                      |        |                      |                      |        |
| Operating ambient temperature range     | -13°F to 140°F (-25°C to 60°C)   |                      |        |                      |                      |        |
| Ingress protection                      | TYPE 4X  |                      |        |                      |                      |        |
| Noise emission (typical)                | ≤ 55 dB(A)   |                      |        |                      |                      |        |
| Cooling concept                         | Natural cooling  |                      |        |                      |                      |        |
| Max. operation altitude                 | 13,120 ft (4000 m)   |                      |        |                      |                      |        |
| Compliance                              | UL1741SB, IEEE 1547-2018, UL1699B, UL1998, FCC Part15 ClassB, California Rule 21, Heco Rule 14H, NEC 690.12-2020, CAN/CSA C22.2107.1-1 |                      |        |                      |                      |        |
| <b>Features</b>                         |  |                      |        |                      |                      |        |
| DC connection                           | MC4 connector  |                      |        |                      |                      |        |
| AC connection                           | OT terminal (4 AWG to 3/0 AWG)   |                      |        |                      |                      |        |
| Display                                 | LCD  |                      |        |                      |                      |        |
| Communication                           | Modbus RTU (Sunspec compliant), RS485, Optional: Cellular, Wi-Fi   |                      |        |                      |                      |        |