

## S6-GC(80-125)K

# Solis Three Phase Grid-Tied Inverters

### Efficient

- 8/10 MPPTs, max. efficiency 98.7%
- > 150% DC/AC ratio
- String current up to 21A, perfectly match large current bifacial modules

### Safe

- IP66
- AFCI protection, proactively reduces fire risk
- Globally recognised branded componentry for longer life

### Smart

- Supports export power control
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

### Economic

- Power line communication (PLC) (optional)
- Night time PID recovery function, increases overall system yield (optional)
- DC side supports "Y" connector

### Models:

S6-GC80K / S6-GC100K

S6-GC110K / S6-GC125K

S6-GC125K-HV



## DATASHEET

## S6-GC(80-125)K

| 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. 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                                     |                   |             |
| Integrated AFCI (DC arc-fault circuit protection) |                                     |                                      | Yes <sup>(1)</sup>                      |                   |             |
| Integrated PID recovery                           |                                     |                                      | Optional                                |                   |             |
| Integrated DC switch                              |                                     |                                      | Yes                                     |                   |             |
| Integrated AC switch                              |                                     |                                      | 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 redundant fan-cooling       |                   |             |
| Max. operation altitude                           |                                     |                                      | 4000 m                                  |                   |             |
| Grid connection standard                          | G99, IEC61727, EN50549-1/2, VDE4110 |                                      |   | IEC61727          |             |
| 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       |                   |             |

(1) Activation required.