

## S5-GC80K

# Solis Three Phase Grid-Tied Inverters

### Efficient

- 9 MPPTs, max. efficiency 98.7%
- > 150% DC/AC ratio
- String current up to 16A, perfectly match large current bifacial modules

### Smart

- Night SVG function
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

### Safe

- IP66
- Built-in PID recovery for better module performance (optional)
- AFCI protection, proactively reduces fire risk
- Globally recognised branded componentry for longer life

### Economic

- Power line communication (PLC) (optional)
- DC side supports "Y" connector

### Models:

S5-GC80K



360° View



# DATASHEET

# S5-GC80K

| Models                                  | 80K   |
|---|---|
| <b>Input DC</b>                         |   |
| Max. input voltage                      | 1100 V  |
| Rated voltage                           | 600 V   |
| Start-up voltage                        | 195 V   |
| MPPT voltage range                      | 180 - 1000 V  |
| Max. input current                      | 9 × 32 A  |
| Max. short circuit current              | 9 × 40 A  |
| MPPT number / Max. input strings number | 9 / 18  |
| <b>Output AC</b>                        |   |
| Rated output power                      | 80 kW   |
| Max. apparent output power              | 88 kVA  |
| Max. output power                       | 88 kW   |
| Rated grid voltage                      | 3/N/PE, 220 V / 380 V, 230 V / 400 V  |
| Rated grid frequency                    | 50 Hz / 60 Hz   |
| Rated grid output current               | 121.6 A / 115.5 A   |
| Max. output current                     | 133.7 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 2.0                     | Optional  |
| Integrated PID recovery                 | Optional  |
| Integrated DC switch                    | Yes   |
| Integrated AC switch                    | Optional  |
| <b>General Data</b>                     |   |
| Dimensions (W × H × D)                  | 1050 × 567 × 314.5 mm (with AC switch)  |
| Weight                                  | 85 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                | G98 or G99, VDE-AR-N 4105/VDE-AR-N 4110/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530 |
| 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. 185 mm <sup>2</sup> )   |
| Display                                 | LCD   |
| Communication                           | RS485, Optional: Wi-Fi, GPRS, PLC   |