

## 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

### Safe

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

### Smart

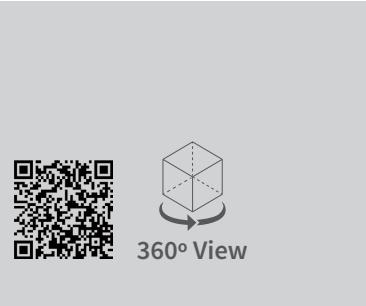
- Night SVG function
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

### Economic

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

### Models:

S5-GC80K



## DATASHEET

## S5-GC80K

| Models                                | <b>80K</b>   |
|---------------------------------------|--|
| <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 redundant fan-cooling  |
| Max. operation altitude               | 4000 m   |
| Grid connection standard              | G98 or G99, VDE-AR-N 4105 / VDE-AR-N 4110 / VDE V0124, 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  |