

## 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
- Nighttime PID recovery function (optional)
- AFCI protection, proactively reduces fire risk

### 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                                                               |
| Rated apparent output power             | 80 kVA                                                              |
| Max. apparent output power              | 80 kVA                                                              |
| Max. output power                       | 80 kW                                                               |
| Rated grid voltage                      | 3/N/PE, 230 V / 400 V                                               |
| Rated grid frequency                    | 50 Hz                                                               |
| Rated grid output current               | 115.5 A                                                             |
| Max. output current                     | 115.5 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                | AS/NZS 4777.2, 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                                   |
| Country of manufacture                  | China                                                               |