

## Solis-(80-110)K-5G-PRO

### Solis Three Phase Grid-Tied Inverters

#### Efficient

- 6/8 MPPTs, max. efficiency 98.5%
- > 150% DC/AC ratio
- Compatible with bifacial modules

#### Smart

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

#### Safe

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

#### Economic

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

#### Models:

Solis-80K-5G-PRO

Solis-100K-5G-PRO

Solis-110K-5G-PRO



## DATASHEET

## Solis-(80-110)K-5G-PRO

| Models                                  | 80K  | 100K   | 110K              |
|---|--|--|-------------------|
| <b>Input DC</b>                         |  |  |                   |
| Max. input voltage                      |  | 1100 V   |                   |
| Rated voltage                           |  | 600 V  |                   |
| Start-up voltage                        |  | 180 V  |                   |
| MPPT voltage range                      |  | 160 - 1000 V   |                   |
| Max. input current                      | 3 × (40 A / 32 A)                                  |  | 4 × (40 A / 32 A) |
| Max. short circuit current              | 6 × 50 A   |  | 8 × 50 A          |
| MPPT number / Max. input strings number | 6 / 12   |  | 8 / 16            |
| <b>Output AC</b>                        |  |  |                   |
| Rated output power                      | 80 kW  | 100 kW   | 110 kW            |
| Max. apparent output power              | 88 kVA   | 110 kVA  | 121 kVA           |
| Max. output power                       | 88 kW  | 110 kW   | 121 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                                  | 152.0 A / 144.3 A  | 167.1 A / 158.8 A |
| Max. output current                     | 133.7 A  | 167.1 A  | 183.8 A           |
| Power factor                            | > 0.99 (0.8 leading - 0.8 lagging)                 |  |                   |
| THDi                                    | < 3%   |  |                   |
| DC injection current                    | < 0.5% I <sub>n</sub>                              |  |                   |
| <b>Efficiency</b>                       |  |  |                   |
| Max. efficiency                         | 98.5%  |  |                   |
| EU efficiency                           | 98.0%  |  |                   |
| <b>Protection</b>                       |  |  |                   |
| DC reverse-polarity protection          | Yes  |  |                   |
| Short circuit protection                | Yes  |  |                   |
| Output over current protection          | Yes  |  |                   |
| Insulation resistance monitoring        | Yes  |  |                   |
| Residual current detection              | 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)                  | 1065 × 585 × 363 mm<br>(with or without AC switch) | 1183 × 585 × 363 mm (with no AC switch);<br>1295 × 585 × 363 mm (with AC switch) |                   |
| Weight                                  | 78 kg  | 98 kg  |                   |
| Topology                                | Transformerless                                    |  |                   |
| Self-consumption (night)                | < 2 W  |  |                   |
| Operating ambient temperature range     | - 30 ~ +60°C                                       |  |                   |
| Relative humidity                       | 0 - 100%   |  |                   |
| Ingress protection                      | IP66   |  |                   |
| Noise emission (typical)                | < 80dB(A)  |  |                   |
| Cooling concept                         | Intelligent fan-cooling                            |  |                   |
| Max. operation altitude                 | 4000 m   |  |                   |
| Grid connection standard                | G99, IEC61727, EN50549-1/2, VDE4110                |  |                   |
| 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: S3-WiFi-ST, S3-GRPS-ST, PLC       |  |                   |