

# Solis-(100-110)K-5G-SA

Solis Three Phase Inverters



## Features:

- ▶ 98.7% Max. efficiency
- ▶ Wide voltage range and low startup voltage
- ▶ 10 MPPT design with precise MPPT algorithm
- ▶ THDi<3%, low harmonic distortion against grid
- ▶ Anti-resonance, supporting over 6MW paralleled in one transformer
- ▶ Perfect commercial site monitoring solution
- ▶ Intelligent redundant fan-cooling
- ▶ Strings intelligent monitoring, Smart I-V Curve Diagnosis supported
- ▶ Fuse free design to avoid fire hazard
- ▶ Type II surge arrester for both DC and AC, type I surge arrester optional
- ▶ Leakage current repression technology
- ▶ Volt-watt work mode integrated
- ▶ DC input reverse alarm
- ▶ Optional anti-PID function integrated
- ▶ Integrated DC switches, AC switch optional



## Model:

**400V:** Solis-100K-5G-SA   Solis-110K-5G-SA

## Datasheet

| Model Name  | Solis-100K-5G-SA                             | Solis-110K-5G-SA |
|---|--|------------------|
| <b>Input DC</b>                                   |  |                  |
| Max. input voltage                                | 1100V  |                  |
| Rated voltage                                     | 600V   |                  |
| Start-up voltage                                  | 195V   |                  |
| MPPT voltage range                                | 180-1000V                                    |                  |
| Max. input current                                | 10*26A                                       |                  |
| Max. short circuit current                        | 10*40A                                       |                  |
| MPPT number/Max. input strings number             | 10/20  |                  |
| <b>Output AC</b>                                  |  |                  |
| Rated output power                                | 100kW  | 110kW            |
| Max. apparent output power                        | 110kVA                                       | 121kVA           |
| Max. output power                                 | 110kW  | 121kW            |
| Rated grid voltage                                | 3/N/PE, 220/380V, 230/400V                   |                  |
| Rated grid frequency                              | 50/60Hz                                      |                  |
| Rated grid output current                         | 152.0A                                       | 167.1A           |
| Max. output current                               | 167.1A                                       | 183.8A           |
| 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 (AC Type I optional) |                  |
| Grid monitoring                                   | Yes  |                  |
| Anti-islanding protection                         | Yes  |                  |
| Strings monitoring                                | Yes  |                  |
| I/V Curve scanning                                | Yes  |                  |
| Anti-PID function                                 | Optional                                     |                  |
| Integrated AFCI (DC arc-fault circuit protection) | Yes  |                  |
| Integrated DC switch                              | Yes  |                  |
| Integrated AC switch                              | Optional                                     |                  |
| <b>General Data</b>                               |  |                  |
| Dimensions (W*H*D)                                | 1065 * 567 * 344.5mm(to be determined)       |                  |
| Weight  | 84 kg(to be determined)                      |                  |
| Topology  | Transformerless                              |                  |
| Self consumption                                  | <2W (night)                                  |                  |
| Operating ambient temperature range               | -25 ~ +60°C                                  |                  |
| Relative humidity                                 | 0-100%                                       |                  |
| Ingress protection                                | IP66   |                  |
| Cooling concept                                   | Intelligent redundant fan-cooling            |                  |
| Max. operation altitude                           | 4000m  |                  |
| Grid connection standard                          | NRS 097-2-1                                  |                  |
| Safety/EMC standard                               | IEC 62109-1/-2, IEC 62116, 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            |                  |