

# Solis-80K-5G

Solis 5G Three Phase Inverters



## Features:

- ▶ Over 98.7% Max. efficiency
- ▶ Wide voltage range and low startup voltage
- ▶ 9 MPPT design with precise MPPT algorithm
- ▶ THDi<3%, low harmonic distortion against grid
- ▶ Anti-resonance, Supporting over 6MW parallelled in one transformer
- ▶ Perfect commercial site monitoring solution
- ▶ Intelligent redundancy fan
- ▶ 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 arrestor optional
- ▶ Leakage current repression technology
- ▶ Volt-watt work mode integrated
- ▶ DC input reverse alarm
- ▶ Optional anti-PID function integrated
- ▶ Integrated AC & DC disconnect switches



## Model:

400V: Solis-80K-5G

## Datasheet

|   |  |
|---|--|
| Model Name  | Solis-80K-5G   |
| <b>Input DC</b>                                   |  |
| Max. input power                                  | 126kW  |
| Max. input voltage                                | 1100V  |
| Rated voltage                                     | 600V   |
| Start-up voltage                                  | 195V   |
| MPPT voltage range                                | 180-1000V  |
| Max. input current                                | 9*26A  |
| Max. Short Circuit current                        | 9*40A  |
| MPPT number/Max. input strings number             | 9/18   |
| <b>Output AC</b>                                  |  |
| Rated output power                                | 80kW   |
| Max. apparent output power                        | 88kVA  |
| Max. output power                                 | 88kW   |
| Rated grid voltage                                | 3/N/PE, 380V/400V  |
| Rated grid frequency                              | 50Hz/60Hz  |
| Rated grid output current                         | 121.6A   |
| Max. output current                               | 133.7A   |
| Power Factor                                      | >0.99 (Adjustable from 0.8 leading to 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/AC)                          | Type II/Type II (AC Type I optional)   |
| Grid monitoring                                   | Yes  |
| Anti-Islanding protection                         | Yes  |
| Temperature protection                            | Yes  |
| Strings monitoring                                | Yes  |
| I/V Curve scanning                                | Yes  |
| Anti-PID function                                 | Optional   |
| Integrated AFCI (DC arc-fault circuit protection) | Optional   |
| Integrated DC switch                              | Yes  |
| Integrated AC switch                              | Optional   |
| <b>General Data</b>                               |  |
| Dimensions (W*H*D)                                | 1050mm*567mm*314.5mm   |
| Weight  | 82kg   |
| 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                          | VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99,<br>EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC61727, DEWA |
| Safety/EMC standard                               | IEC 62109-1/-2, IEC62116 & EN 61000-6-2/-4   |
| <b>Features</b>                                   |  |
| DC connection                                     | MC4  |
| AC connection                                     | OT Terminal connectors   |
| Display   | LCD, 2x20 Z.   |
| Communication                                     | RS485; WiFi/GPRS/PLC (optional)  |