

# Solis-3P(3-20)K-4G

Solis 4G Three Phase Inverters



## Features:

- ▶ Over 98.7% Max. efficiency
- ▶ Wide voltage range and low startup voltage
- ▶ Dual MPPT design with precise MPPT algorithm
- ▶ THDi<1.5%, low harmonic distortion against grid
- ▶ Multiple protections levels
- ▶ Intergrated Export Power Manager(EPM)



## Model:

- |                |                |                |
|----------------|----------------|----------------|
| Solis-3P3K-4G  | Solis-3P4K-4G  | Solis-3P5K-4G  |
| Solis-3P6K-4G  | Solis-3P8K-4G  | Solis-3P9K-4G  |
| Solis-3P10K-4G | Solis-3P12K-4G | Solis-3P15K-4G |
| Solis-3P17K-4G | Solis-3P20K-4G |                |

## Datasheet

| Model Name | Solis-3P3K-4G | Solis-3P4K-4G | Solis-3P5K-4G | Solis-3P6K-4G | Solis-3P8K-4G | Solis-3P9K-4G | Solis-3P10K-4G | Solis-3P12K-4G | Solis-3P15K-4G | Solis-3P17K-4G | Solis-3P20K-4G |
|------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|
|------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|

### Input DC

|                                       |             |       |     |       |       |        |             |        |      |        |      |
|---------------------------------------|-------------|-------|-----|-------|-------|--------|-------------|--------|------|--------|------|
| Max. input power                      | 3.6kW       | 4.8kW | 6kW | 7.2kW | 9.6kW | 10.8kW | 12kW        | 14.5kW | 18kW | 20.4kW | 24kW |
| Max. input voltage                    | 1000V       |       |     |       |       |        |             |        |      |        |      |
| Rated voltage                         | 600V        |       |     |       |       |        |             |        |      |        |      |
| Start-up voltage                      | 180V        |       |     |       |       |        |             |        |      |        |      |
| MPPT voltage range                    | 160-850V    |       |     |       |       |        |             |        |      |        |      |
| Max. input current                    | 11A/11A     |       |     |       |       |        | 22A/22A     |        |      |        |      |
| Max. Short Circuit current            | 17.2A/17.2A |       |     |       |       |        | 34.3A/34.3A |        |      |        |      |
| MPPT number/Max. input strings number | 2/2         |       |     |       |       |        | 2/4         |        |      |        |      |

### Output AC

|                            |  |           |           |           |             |             |             |             |             |             |             |
|----------------------------|--|-----------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Rated output power         | 3kW  | 4kW       | 5kW       | 6kW       | 8kW         | 9kW         | 10kW        | 12kW        | 15kW        | 17kW        | 20kW        |
| Max. apparent output power | 3.3kVA   | 4.4kVA    | 5.5kVA    | 6.6kVA    | 8.8kVA      | 9.9kVA      | 11kVA       | 13.2kVA     | 16.5kVA     | 18.7kVA     | 22kVA       |
| Max. output power          | 3.3kW  | 4.4kW     | 5.5kW     | 6.6kW     | 8.8kW       | 9.9kW       | 11kW        | 13.2kW      | 16.5kW      | 18.7kW      | 22kW        |
| Rated grid voltage         | 3/N/PE, 220/380V, 230/400V                         |           |           |           |             |             |             |             |             |             |             |
| Rated grid frequency       | 50Hz/60Hz  |           |           |           |             |             |             |             |             |             |             |
| Rated grid output current  | 4.6A/4.3A  | 6.1A/5.8A | 7.6A/7.2A | 9.1A/8.7A | 12.2A/11.5A | 13.7A/13.0A | 15.2A/14.4A | 18.2A/17.3A | 22.8A/21.7A | 25.8A/24.6A | 30.4A/28.9A |
| Max. output current        | 4.7A   | 6.4A      | 7.9A      | 9.5A      | 12.7A       | 14.2A       | 15.9A       | 19.1A       | 23.8A       | 27A         | 31.8A       |
| Power Factor               | >0.99 (Adjustable from 0.8 leading to 0.8 lagging) |           |           |           |             |             |             |             |             |             |             |
| THDi                       | <1.5%  |           |           |           |             |             |             |             |             |             |             |

### Efficiency

|                 |       |  |  |  |  |  |       |  |  |  |  |
|-----------------|-------|--|--|--|--|--|-------|--|--|--|--|
| Max. efficiency | 98.3% |  |  |  |  |  | 98.7% |  |  |  |  |
| EU efficiency   | 97.8% |  |  |  |  |  | 98.1% |  |  |  |  |

### Protection

|                                |          |  |  |  |  |  |  |  |  |  |  |
|--------------------------------|----------|--|--|--|--|--|--|--|--|--|--|
| DC reverse-polarity protection | Yes      |  |  |  |  |  |  |  |  |  |  |
| Short circuit protection       | Yes      |  |  |  |  |  |  |  |  |  |  |
| Output over current protection | Yes      |  |  |  |  |  |  |  |  |  |  |
| Surge protection (DC/AC)       | Yes      |  |  |  |  |  |  |  |  |  |  |
| Grid monitoring                | Yes      |  |  |  |  |  |  |  |  |  |  |
| Islanding protection           | Yes      |  |  |  |  |  |  |  |  |  |  |
| Temperature protection         | Yes      |  |  |  |  |  |  |  |  |  |  |
| Integrated DC switch           | Optional |  |  |  |  |  |  |  |  |  |  |

### General Data

|                                     |  |  |  |  |      |  |  |                                   |  |        |  |
|-------------------------------------|--|--|--|--|------|--|--|-----------------------------------|--|--------|--|
| Dimensions (W*H*D)                  | 310mm*563mm*219mm  |  |  |  |      |  |  |                                   |  |        |  |
| Weight                              | 17.3kg   |  |  |  | 18kg |  |  | 18.9kg                            |  | 19.8kg |  |
| Topology                            | Transformerless  |  |  |  |      |  |  |                                   |  |        |  |
| Self consumption                    | <1W (Night)  |  |  |  |      |  |  |                                   |  |        |  |
| Operating ambient temperature range | -25~60°C   |  |  |  |      |  |  |                                   |  |        |  |
| Relative humidity                   | 0~100%   |  |  |  |      |  |  |                                   |  |        |  |
| Ingress protection                  | IP65   |  |  |  |      |  |  |                                   |  |        |  |
| Cooling concept                     | Natural convection   |  |  |  |      |  |  | 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, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, EC61727 |  |  |  |      |  |  |                                   |  |        |  |
| Safety/EMC standard                 | IEC 62109-1/-2, IEC62116, EN 61000-6-1/-2/-3/-4  |  |  |  |      |  |  |                                   |  |        |  |

### Features

|               |                             |  |  |  |  |  |  |  |  |  |  |
|---------------|-----------------------------|--|--|--|--|--|--|--|--|--|--|
| DC connection | MC4                         |  |  |  |  |  |  |  |  |  |  |
| AC connection | Terminal connectors         |  |  |  |  |  |  |  |  |  |  |
| Display       | LCD, 2x20 Z.                |  |  |  |  |  |  |  |  |  |  |
| Communication | RS485; WiFi/GPRS (optional) |  |  |  |  |  |  |  |  |  |  |