

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

Solis Three Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 98.7%
- ▶ Wide voltage range and low startup voltage
- ▶ 2 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

| | | | | | | | | | | | |
|---------------------------------------|-----------------|------|--------|------|-------|---------|-----------------|-------|---------|---------|-------|
| Recommended max. PV power | 4.5 kW | 6 kW | 7.5 kW | 9 kW | 12 kW | 13.5 kW | 15 kW | 18 kW | 22.5 kW | 25.5 kW | 30 kW |
| Max. input voltage | 1000 V | | | | | | | | | | |
| Rated voltage | 600 V | | | | | | | | | | |
| Start-up voltage | 180 V | | | | | | | | | | |
| MPPT voltage range | 160-850 V | | | | | | | | | | |
| Max. input current | 11 A / 11 A | | | | | | 22 A / 22 A | | | | |
| Max. short circuit current | 17.2 A / 17.2 A | | | | | | 34.3 A / 34.3 A | | | | |
| MPPT number/Max. input strings number | 2/2 | | | | | | 2/4 | | | | |

Output AC

| | | | | | | | | | | | |
|----------------------------|-------------------------------------|-----------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Rated output power | 3 kW | 4 kW | 5 kW | 6 kW | 8 kW | 9 kW | 10 kW | 12 kW | 15 kW | 17 kW | 20 kW |
| Max. apparent output power | 3.3 kVA | 4.4 kVA | 5.5 kVA | 6.6 kVA | 8.8 kVA | 9.9 kVA | 11 kVA | 13.2 kVA | 16.5 kVA | 18.7 kVA | 22 kVA |
| Max. output power | 3.3 kW | 4.4 kW | 5.5 kW | 6.6 kW | 8.8 kW | 9.9 kW | 11 kW | 13.2 kW | 16.5 kW | 18.7 kW | 22 kW |
| Rated grid voltage | 3/N/PE, 220 V / 380 V, 230 V / 400V | | | | | | | | | | |
| Rated grid frequency | 50 Hz / 60 Hz | | | | | | | | | | |
| 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 | 4.7 A | 6.4 A | 7.9 A | 9.5 A | 12.7 A | 14.3 A | 15.9 A | 19.1 A | 23.8 A | 27 A | 31.8 A |
| Power Factor | >0.99 (0.8 leading - 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 | Yes | | | | | | | | | | |
| Grid monitoring | Yes | | | | | | | | | | |
| Anti-islanding protection | Yes | | | | | | | | | | |
| Temperature protection | Yes | | | | | | | | | | |
| Integrated AFCI (DC arc-fault circuit protection) | Yes* | | | | | | | | | | |
| Integrated DC switch | Optional | | | | | | | | | | |

General Data

| | | | | | | | | | | | |
|-------------------------------------|---|--|--|--|-------|--|--|-----------------------------------|--|---------|--|
| Dimensions (W*H*D) | 310*563*219 mm | | | | | | | | | | |
| Weight | 17.3 kg | | | | 18 kg | | | 18.9 kg | | 19.8 kg | |
| Topology | Transformerless | | | | | | | | | | |
| Self consumption (night) | <1 W | | | | | | | | | | |
| 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 | 4000 m | | | | | | | | | | |
| Grid connection standard | G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530 | | | | | | | | | | |
| Safety/EMC standard | IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4 | | | | | | | | | | |

Features

| | | | | | | | | | | | |
|---------------|------------------------------|--|--|--|--|--|--|--|--|--|--|
| DC connection | MC4 connector | | | | | | | | | | |
| AC connection | Quick connection plug | | | | | | | | | | |
| Display | LCD | | | | | | | | | | |
| Communication | RS485, Optional: Wi-Fi, GPRS | | | | | | | | | | |

* Activation required.