

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

Solis Three Phase Inverters



360 degree

Features:

- ▶ Over 98.7% Max. efficiency
- ▶ 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 |
|------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|
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Input DC

| | | | | | | | | | | | |
|---------------------------------------|-------------|-------|-----|-------|-------|--------|-------------|--------|------|--------|------|
| Recommended max. PV 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 | 50/60Hz | | | | | | | | | | |
| 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 | 14.3A | 15.9A | 19.1A | 23.8A | 27A | 31.8A |
| 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 DC switch | Optional | | | | | | | | | | |

General Data

| | | | | | | | | | | | |
|-------------------------------------|--|--|--|--|------|--|--|-----------------------------------|--|--------|--|
| Dimensions (W*H*D) | 310*563*219 mm | | | | | | | | | | |
| 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, IEC 61727 | | | | | | | | | | |
| Safety/EMC standard | IEC 62109-1/-2, IEC 62116, EN 61000-6-1/-2/-3/-4 | | | | | | | | | | |

Features

| | | | | | | | | | | | |
|---------------|------------------------------|--|--|--|--|--|--|--|--|--|--|
| DC connection | MC4 connector | | | | | | | | | | |
| AC connection | Quick connection plug | | | | | | | | | | |
| Display | LCD, 2×20 Z | | | | | | | | | | |
| Communication | RS485, Optional: Wi-Fi, GPRS | | | | | | | | | | |