

Solis-3P(5-20)K-4G-AU

Solis Three Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 98.7%
- ▶ Complies with all state network requirements
- ▶ Integrate with adjustable Volt-Watt and Volt-Var function
- ▶ DRM integrated, fully comply with AS/NZS 4777.2:2020
- ▶ Built-in DC-PV2 Switch (optional), comply with AS/NZS 5033 requirements
- ▶ Support 24h consumption monitoring with a smart meter
- ▶ 2 MPPT design with precise MPPT algorithm
- ▶ THDi<1.5%, low harmonic distortion against grid
- ▶ Integrated Export Power Manager(EPM)
- ▶ Multiple protections functions
- ▶ Voltage active power and reactive power



Model:

- | | |
|---------------------|---------------------|
| Solis-3P5K-4G-AU | Solis-3P5K-4G-AU-MX |
| Solis-3P6K-4G-AU | Solis-3P8K-4G-AU |
| Solis-3P8K-4G-AU-MX | Solis-3P9K-4G-AU |
| Solis-3P10K-4G-AU | Solis-3P12K-4G |
| Solis-3P15K-4G | Solis-3P17K-4G |
| Solis-3P20K-4G | |

Datasheet

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

Input DC

| | | | | | | | | | | | |
|---------------------------------------|-------------|-------|-------|-------|-------|-------------|-------|-------|---------|-------|-------|
| Recommended max. PV power | 10 kW | 10 kW | 12 kW | 12 kW | 12 kW | 13.5 kW | 15 kW | 18 kW | 22.5 kW | 24 kW | 24 kW |
| Max. input voltage | 1000 V | | | | | | | | | | |
| Rated voltage | 600 V | | | | | | | | | | |
| Start-up voltage | 180 V | | | | | | | | | | |
| MPPT voltage range | 160-850 V | | | | | | | | | | |
| Max. input current | 22 A / 11 A | | | | | 22 A / 22 A | | | | | |
| Max. short circuit current | 30 A / 15 A | | | | | 30 A / 30 A | | | | | |
| MPPT number/Max. input strings number | 2/2 | | | | | 2/4 | | | | | |

Output AC

| | | | | | | | | | | | |
|-----------------------------|-----------------------------------|-----------|---------|---------|-----------|---------|--------|----------|----------|----------|--------|
| Rated output power | 5 kW | 4.999 kW | 6 kW | 8 kW | 7.999 kW | 9 kW | 10 kW | 12 kW | 15 kW | 17 kW | 20 kW |
| Rated output apparent power | 5 kVA | 4.999 kVA | 6 kVA | 8 kVA | 7.999 kVA | 9 kVA | 10 kVA | 12 kVA | 15 kVA | 17 kVA | 20 kVA |
| Max. apparent output power | 5.5 kVA | 4.999 kVA | 6.6 kVA | 8.8 kVA | 7.999 kVA | 9.9 kVA | 11 kVA | 13.2 kVA | 16.5 kVA | 18.7 kVA | 22 kVA |
| Max. output power | 5.5 kW | 4.999 kW | 6.6 kW | 8.8 kW | 7.999 kW | 9.9 kW | 11 kW | 13.2 kW | 16.5 kW | 18.7 kW | 22 kW |
| Rated grid voltage | 3/N/PE, 230 V / 400 V | | | | | | | | | | |
| Rated grid frequency | 50 Hz | | | | | | | | | | |
| Rated grid output current | 7.2 A | 7.2 A | 8.7 A | 11.5 A | 11.5 A | 13 A | 14.4 A | 17.3 A | 21.7 A | 24.6 A | 28.9 A |
| Max. output current | 7.9 A | 7.9 A | 9.5 A | 12.7 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 DC switch | Optional (PV2 Switch) | | | | | | | | | | |

General Data

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|-------------------------------------|--|--|--|--|--|--|--|--|--|---------|--|
| Dimensions (W*H*D) | 310*563*219 mm | | | | | | | | | | |
| Weight | 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 | Intelligent redundant fan-cooling | | | | | | | | | | |
| Max. operation altitude | 2000 m | | | | | | | | | | |
| Grid connection standard | AS/NZS 4777.2:2020, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530 | | | | | | | | | | |
| Safety/EMC standard | IEC 62109-1/-2, IEC 61000-6-1/-2/-3/-4 | | | | | | | | | | |

Features

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