

Solis-1P(6-10)K-4G-US

Solis Single Phase US Inverters



Features:

- ▶ Max. efficiency 97.8% (CEC efficiency 97.5%)
- ▶ String current up to **14A**
- ▶ CA Rule 21 compliant and UL 1741 SB Certified
- ▶ Sunspec protocol with cellular and WiFi communication
- ▶ Built-in module level rapid shutdown transmitter
- ▶ Support module level monitoring
- ▶ Optional Built-in Revenue Grade Meter, ANSI C12.20-2010 compliance
- ▶ Industry-leading 3 and 4 MPPT designs
- ▶ Integrated Arc Fault Circuit Interrupt (AFCI)
- ▶ 10 years standard warranty with extension options

Model:

- Solis-1P6K-4G-US
- Solis-1P7K-4G-US
- Solis-1P7.6K-4G-US
- Solis-1P8.6K-4G-US
- Solis-1P9K-4G-US
- Solis-1P10K-4G-US



Ordering: Solis-1P(6-10)K-4G-US-PLUS

- **APST** (APS MLRSD Transmitter)
- **RGM-APST** (Revenue Grade Meter and APS MLRSD Transmitter)
- **RSS** (Tigo MLRSD Transmitter)
- **RGM-RSS** (Revenue Grade Meter and Tigo MLRSD Transmitter)

Datasheet

| Model Name | Solis-1P6K-4G-US | Solis-1P7K-4G-US | Solis-1P7.6K-4G-US | Solis-1P8.6K-4G-US | Solis-1P9K-4G-US | Solis-1P10K-4G-US |
|------------|------------------|------------------|--------------------|--------------------|------------------|-------------------|
|------------|------------------|------------------|--------------------|--------------------|------------------|-------------------|

Input DC

| | | | | | | |
|---------------------------------------|--------------------|---------|---------|---------|---------|-------|
| Recommended max. PV power | 9.6 kW | 11.2 kW | 12.2 kW | 13.8 kW | 14.4 kW | 16 kW |
| Max. input voltage | 600 V | | | | | |
| Rated voltage | 330 V | | | | | |
| Start-up voltage | 120 V | | | | | |
| MPPT voltage range | 100 - 500 V | | | | | |
| Max. input current | 14 A / 14 A / 14 A | | | 4*14 A | | |
| Max. short circuit current | 22 A / 22 A / 22 A | | | 4*22 A | | |
| MPPT number/Max. input strings number | 3/3 | | | 4/4 | | |

Output AC

| | | | | | | |
|------------------------------------|-----------------------------------|--------|---------|---------|--------|--------|
| Rated output power | 6 kW | 7 kW | 7.6 kW | 8.6 kW | 9 kW | 10 kW |
| Max. apparent output power | 6 kVA | 7 kVA | 7.6 kVA | 8.6 kVA | 9 kVA | 10 kVA |
| Max. output power | 6 kW | 7 kW | 7.6 kW | 8.6 kW | 9 kW | 10 kW |
| Rated grid voltage | 1Φ/PE, 240 V / 208 V | | | | | |
| Rated grid frequency | 60 Hz | | | | | |
| Max. output current for 240 V grid | 25 A | 29.2 A | 31.7 A | 35.8 A | 37.5 A | 41.7 A |
| Max. output current for 208 V grid | 28.8 A | 33.7 A | 36.5 A | 41.3 A | 43.3 A | 43.3 A |
| Power Factor | >0.99 (0.8 leading - 0.8 lagging) | | | | | |
| THDi | <3% | | | | | |

Efficiency

| | | | | | | |
|-----------------|-------|--|--|--|--|--|
| Max. efficiency | 97.8% | | | | | |
| CEC efficiency | 97.5% | | | | | |

Protection

| | | | | | | |
|---|--|--|--|--|--|--|
| DC reverse-polarity protection | Yes | | | | | |
| Ground fault monitoring | Yes | | | | | |
| Anti-islanding protection | Yes | | | | | |
| Integrated AFCI (DC arc-fault circuit protection) | Yes | | | | | |
| Integrated DC switch | Yes | | | | | |
| Rapid shutdown | Built-In APS or Tigo Transmitter | | | | | |
| Compliant MLRSD Products | TS4-A-F/2F, RSD-PFK, APSmart RSD-S / RSD-D | | | | | |

General Data

| | | | | | | |
|-------------------------------------|---|--|--|---------------------|--|--|
| Dimensions (W*H*D) | 13.1*28.8*9.8 in (333*732*249 mm) | | | | | |
| Weight | 45.2 lbs (20.5 kgs) | | | 45.6 lbs (20.7 kgs) | | |
| Topology | Transformerless | | | | | |
| Self consumption (night) | <1 W | | | | | |
| Relative humidity | 0-100% | | | | | |
| Operating ambient temperature range | -13°F to 140°F (-25°C to 60°C) | | | | | |
| Storage environment | -13°F to 176°F (-25°C to 80°C) | | | | | |
| Ingress protection | TYPE 4X | | | | | |
| Cooling concept | Natural convection | | | | | |
| Max. operation altitude | 13,120 ft (4000 m) | | | | | |
| Compliance | UL 1741, IEEE 1547-2018, UL 1699B, UL 1998, FCC, UL 1741SB, California Rule 21, NEC 690.12-2020 | | | | | |

Features

| | | | | | | |
|---------------|--|--|--|--|--|--|
| DC connection | 2 knockout for 1"conduit at bottom, 4 knockout for3/4"conduit at side and back, Screw clamp terminal | | | | | |
| AC connection | 2 knockout for 1"conduit at bottom, 4 knockout for3/4"conduit at side and back, OT terminal | | | | | |
| Display | LCD | | | | | |
| Communication | RS485, Optional: Cellular, Wi-Fi | | | | | |