

Solis-1P8.6K-4G-US

Solis 4G Single Phase US Inverters



Features:

- ▶ CA Rule 21 Phase I and II compliant (ready for Phase III) and UL 1741 (SA) certified
- ▶ Sunspec communication protocol with optional cellular and Wi-Fi interface
- ▶ Built-in Sunspec Certified Module Level Rapid Shutdown Transmitter
- ▶ Optional Built-in Revenue Grade Meter, ANSI C12.20-2010 compliance
- ▶ Industry-leading 4 MPPT designs
- ▶ Integrated Arc Fault Circuit Interrupt (AFCI)
- ▶ 97.8% peak efficiency (97.5% CEC efficiency)
- ▶ 10 years standard warranty with extension options



Model:

Solis-1P8.6K-4G-US

Datasheet

| Model | Solis-1P8.6K-4G-US |
|---|--|
| DC Values | |
| Max. DC input power (watts) | 9900 |
| Max. voltage (volts) | 600 |
| Rated voltage (volts) | 330 |
| Startup voltage (volts) | 120 |
| Operating MPPT voltage range (volts) | 100-500 |
| Max. usable input current per MPPT (amps) | 4*10 |
| Max. short circuit input current (amps) | 4*15.6 |
| Number of MPPTs/Max. input strings number | 4/4 |
| AC Values | |
| Nominal and max. output power 240V grid (watts) | 8600 |
| Nominal and max. output power 208V grid (watts) | 8600 |
| Nominal grid voltage (volts) | 240/208 |
| Nominal grid frequency (hertz) | 60 |
| Operating phase | Single Phase |
| Max. output current for 240V grid (amps) | 35.8 |
| Max. output current for 208V grid (amps) | 41.3 |
| Output power factor | >0.99 |
| Output power factor range | 0.8 leading ... 0.8 lagging |
| Grid current THD | <3% |
| Efficiency | |
| Peak efficiency | 97.8% |
| CEC weighted efficiency | 97.5% |
| MPPT efficiency | >99.5% |
| Protection | |
| DC reverse-polarity protection | Yes |
| AC short circuit protection | Yes |
| AC output overcurrent protection | Yes |
| Output overvoltage protection-Varistor | Yes |
| Ground fault monitoring | Yes |
| Grid monitoring | Yes |
| Islanding protection | Yes |
| Integrated AFCI (DC arc-fault circuit protection) | Yes |
| Integrated DC switch | Yes |
| Rapid shutdown | Yes, Sunspec Certified Built-in Transmitter |
| Compliant MLRSD Products | Solis-MLRSD-R(1-2)-1G, APSmart RSD-S-PLC |
| General Data | |
| Dimensions (width*height*depth) | 13.5*28.8*9.8in (342*732*249 mm) |
| Weight | 45.6lbs (20.7kgs) |
| Topology | Transformerless |
| Internal consumption | <1W (night) |
| Ambient operating temperature range | -13°F to 140°F (-25°C to 60°) |
| Enclosure type | NEMA 4X |
| Noise emission (typical) | <30dB(A) |
| Cooling concept | Natural convection |
| Max. operating altitude without derating | 13, 120ft (4000m) |
| Designed lifetime | >20years |
| Compliance | L 1741, UL 1741 SA, Rule 21 Phase I and II compliant (ready for Phase III), UL 1998, UL 1699B, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-1 |
| Features | |
| RGM | Optional |
| Communication protocol | Modbus RTU (Sunspec compliant) |
| Communication | Optional cellular and Wi-Fi |
| Connections | 2 knockout for 1" conduit at bottom, 4 knockout for 3/4" conduit at side and back |
| Display | LCD-2x20 Z |
| Warranty | 10 Years standard (extendable to 20 years) |