

Solis-1P4.6K-4G-US

Solis 4G Single Phase US Inverters



Features:

- ▶ CA Rule 21 Phase I & 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
- ▶ Fast and dynamic MPPTs and industry-leading DC voltage range
- ▶ Integrated Arc Fault Circuit Interrupt (AFCI)
- ▶ 98.1% peak efficiency (97.3% CEC efficiency)
- ▶ 10 years standard warranty with extension options



Model:

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Datasheet

Model	Solis-1P4.6K-4G-US
DC Values	
Max. DC power (watts)	5500
Max. voltage (volts)	600
Rated voltage (volts)	330
Startup voltage (volts)	120
Operating MPPT voltage range (volts)	90-520
Max. usable input current per MPPT (amps)	2*11
Max. short circuit input current (amps)	2*17.2
Number of MPPTs/Max. input strings number	2/2
AC Values	
Nominal and max. output power 240V grid (watts)	4600
Nominal and max. output power 208V grid (watts)	4600
Nominal grid voltage (volts)	240/208
Nominal grid frequency (hertz)	60
Operating phase	Single Phase
Max. output current for 240V grid (amps)	19.2
Max. output current for 208V grid (amps)	22.1
Output power factor	>0.99
Output power factor range	0.8 leading ... 0.8 lagging
Grid current THD	<3%
Efficiency	
Peak efficiency	98.1%
CEC weighted efficiency	97.3%
MPPT efficiency	>99.5%
Protection	
DC reverse-polarity protection	Yes
Ground fault 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)	13.9*31.9*6.5in (352*810*164mm)
Weight	33.1lbs (15kgs)
Topology	Transformerless
Internal consumption	<1W (night)
Ambient operating temperature range	-13°F to 140°F (-25°C to 60°C)
Storage environment	-13°F to 176°F (-25°C to 80°C)
Enclosure type	NEMA 4X
Noise emission (typical)	<30dB(A)
Cooling concept	Natural convection
Max. operating altitude without derating	13, 120ft (4000m)
Compliance	UL 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
Operating surroundings humidity	0~100% Condensing
Features	
RGM	Optional
Communication protocol	Modbus RTU (Sunspec compliant)
Communication	Optional cellular and Wi-Fi
Connections	2 knockouts for 3/4" conduit at bottom, side and back
Display	LCD-2x20 Z
Warranty	10 Years standard (extendable to 20 years)