

Solis-(50-66)K-US-F

Solis Three Phase US Inverters



Features:

- ▶ Max. efficiency 98.8% (CEC efficiency 98.4%) with ultra-low start up voltage
- ▶ Compact and lightweight design inside a corrosion-resistant NEMA 4X enclosure
- ▶ Designed for all commercial, industrial, and utility-scale applications
- ▶ Transformer-less three phase design with 480 Vac output
- ▶ Wide voltage range and low startup voltage
- ▶ Industry-leading 4 MPPT designs with fast (<5 sec.) MPPT response times
- ▶ AFCI protection, proactively reduces fire risk
- ▶ RS-485 Modbus communication protocol with Wi-Fi interface
- ▶ Web-based data monitoring with downloadable Solis Mobile App
- ▶ 10 years standard warranty with extension options



Ordering: Solis-(50-66K)-US-F

- LSW-SPRT (SunSpec MLRSD Transmitter)
- LSW-RSS (Tigo MLRSD Transmitter)
- SW (No Transmitter)

Datasheet

Model Name	Solis-50K-US-F-XX*	Solis-60K-US-F-XX*	Solis-66K-US-F-XX*
Input DC			
Max. input voltage	1000 V		
Rated voltage	720 V		
Start-up voltage	200 V		
MPPT voltage range	200-850 V		
Max. input current	4*28.5 A		
Max. short circuit current	4*55 A		
MPPT number/Max. input strings number	4/16		
Output AC			
Rated output power	50 kW	60 kW	66 kW
Max. apparent output power	50 kVA	60 kVA	66 kVA
Max. output power	50 kW	60 kW	66 kW
Rated grid voltage	3Φ/PE, 480 V		
Rated grid frequency	60 Hz		
Max. output current	60.2 A	72.2 A	79.4 A
Power factor	>0.99 (0.8 leading - 0.8 lagging)		
THDi	<3%		
Efficiency			
Max. efficiency	98.8%		
CEC efficiency	98.4%		
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	Yes		
General Data			
Dimensions (W*H*D)	SW: 24.9*40.4*14.7 in (633*1027*374 mm), LSW: 24.9*47.5*14.7 in (633*1206*374 mm)		
Weight (inverter/wiring box)	SW: 147 lbs (66.7 kgs)/35.4 lbs (16 kgs), LSW: 147 lbs (66.7 kgs)/43.4 lbs (19.7 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	Intelligent redundant fan-cooling		
Max. operation altitude	13,120 ft (4000 m)		
Compliance	UL 1741, IEEE 1547, UL 1699B, UL 1998, FCC, UL 1741SA, California Rule 21, SRD-UL1741, CAN/CSA C22.2 107.1-1		
Features			
DC connection	4 knockout for 2" conduit at bottom and side, Fuse screw terminal (Copper 12-6AWG)		
AC connection	4 knockout for 2" conduit at bottom and side, OT terminal (Copper or aluminum 8-2AWG) Aluminum requires bi-metallic compatible terminal		
Display	LCD		
Communication	Modbus RTU (Sunspec compliant), RS485, Optional: Cellular, Wi-Fi		

* **Ordering guidelines:** Determine the basic model from above and add your desired features as described on PG1
 Ex: Solis-50K-US-F-LSW-SPRT, (inverter internal Sunspec transmitter)