

# Solis-66K-US-F-SW

Solis Three Phase US Inverters



## Features:

- ▶ 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
- ▶ 98.8% efficient (98.4% CEC) with ultra-low start up voltage
- ▶ Industry-leading 4 MPPT designs with fast (<5 sec.) MPPT response times
- ▶ Integrated Arc Fault Circuit Interrupt (AFCI) option
- ▶ RS-485 Modbus communication protocol with Wi-Fi interface
- ▶ 2x20Z LCD Display
- ▶ Web-based data monitoring with downloadable Solis Mobile App
- ▶ 10 years standard warranty with extension options



**Model:**  
Solis-66K-US-F-SW

## Datasheet

Model	Solis-66K-US-F-SW
<b>DC Values</b>	
Max. DC input power (watts)	90000
Max. voltage (volts)	1000
Rated voltage (volts)	720
Startup voltage (volts)	200
Operating MPPT voltage range (volts)	200-850
Max. usable input current per MPPT (amps)	28.5*4
Max. short circuit input current (amps)	55*4
Number of MPPTs/inputs per MPPT	4/4
<b>AC Values</b>	
Nominal output power (watts)	66000
Max. apparent output power (VA)	66000
Nominal grid voltage (volts)	480
Nominal grid frequency (hertz)	60
Operating phase	Three Phase
Max. output current (amps)	79.4
Max. overcurrent protection device (amps)	100
Max output fault current and duration	100,200ms
Power factor	1 (default) and 0.8 leading ... 0.8 lagging adjustable
Grid current THD	<3%
<b>Efficiency</b>	
Peak efficiency	98.8%
CEC weighted efficiency	98.4%
MPPT efficiency	>99.9%
<b>Protection</b>	
Ground fault monitoring	Yes
Islanding protection	Yes
Integrated AFCI(DC arc-fault circuit protection)	Yes
Integrated DC switch	Yes
Rapid shutdown	Yes
<b>General Data</b>	
Connections	4 knockout for 2" conduit at bottom and sides
Surge protection	DC class II and AC class III(optional)
Dimensions (width*height*depth)	24.9*47.6*14.7in (633*1208*374mm)
Weight (inverter)/weight (wiring box)	147lbs (66.7kgs)/35.4lbs (16kgs)
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)	<60dB(A)
Cooling concept	Intelligent redundant cooling
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), Rule 21, UL 1998, UL 1699B, IEEE 1547, FCC Part 15 (Class A&B), CAN/CSA C22.2 107.1-1
<b>Features</b>	
Communication protocol	Modbus RTU (Sunspec compliant)
Communication	Modbus with optional cellular and Wi-Fi
Display	LCD-2x20 Z
Warranty	10 Years standard (extendable to 20 years)