

Solis-(125-255)K-EHV-5G-US

Solis Three Phase Grid-Tied Inverters

Certified by TÜV Rheinland with VDE-AR-N4130, supporting grid connections at Extra High Voltages $\geq 150\text{kV}$ for enhanced grid adaptability.

Efficient

- 9/12/14 MPPTs, max. efficiency 99.0% (CEC efficiency 98.3%)
- > 1.5 DC/AC ratio
- High power tracking density 75MPPT/MW
- Compatible with 500W+ bifacial modules

Smart

- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation⁽¹⁾

Safe

- Type 4X, C5 Anti-Corrosion Level
- UL 1741 SA and SB
- External signal control function
- Integrated nighttime PID recovery for optimal module performance
- Fuse free design, safe and maintenance free
- AFCI protection, proactively reduces fire risk
- High quality components from globally recognized suppliers

Economic

- Power line communication (PLC) (optional)
- DC side supports "Y" connector
- Reserve DC energy storage access

Models:

Solis-125K-EHV-5G-US-PLUS

Solis-185K-EHV-5G-US

Solis-185K-EHV-5G-US-PLUS

Solis-255K-EHV-5G-US

Solis-255K-EHV-5G-US-PLUS



(1) Requires the user to use Solis monitoring

DATASHEET

Solis-(125-255)K-EHV-5G-US

Models	125K-PLUS	185K	185K-PLUS	255K	255K-PLUS
Input DC					
Max. input voltage	1500 V				
Rated voltage	950 V			1080 V	
Start-up voltage	500 V				
MPPT voltage range	480-1500 V				
Max. input current	9*30 A	14*26 A	12*30 A	14*26 A	12*30 A
Max. short circuit current	9*50 A	14*40 A	12*50 A	14*40 A	12*50 A
MPPT number/Max. input strings number	9/18	14/28	12/24	14/28	12/24
Output AC					
Rated output power	125 kW	185 kW		255 kW	
Max. apparent output power	137.5 kVA	185 kVA		255 kVA	
Max. output power	137.5 kW	185 kW		255 kW	
Rated grid voltage	3Φ/PE, 600 V			3Φ/PE, 800 V	
Rated grid frequency	60 Hz				
Max. output current	132.3 A	178.0 A		184.0 A	
Power factor	>0.99 (0.8 leading - 0.8 lagging)				
THDi	<3%				
Efficiency					
Max. efficiency	98.6%	98.7%		99.0%	
CEC efficiency	98.3%				
Protection					
DC reverse-polarity protection	Yes				
Surge protection	DC Type II / AC Type II				
Ground fault monitoring	Yes				
Anti-islanding protection	Yes				
Strings monitoring	Yes				
Integrated AFCI (DC arc-fault circuit protection)	Yes				
Integrated PID recovery	Yes				
I/V Curve scanning	Yes				
General Data					
Dimensions (W*H*D)	46.1*30.3*15.1 in (1170*770*384 mm)				
Weight	240 lbs (109 kgs)	249.0 lbs (113 kgs)			
Topology	Transformerless				
Self-consumption (night)	<2 W				
Relative humidity	0-100%				
Operating ambient temperature range	-22°F to 140°F (-30°C to +60°C)				
Storage environment	-40°F to 176°F (-40°C to 80°C)				
Ingress protection	TYPE 4X				
Cooling concept	Intelligent redundant fan-cooling				
Max. operation altitude	13,120 ft (4000 m)				
Compliance	UL 1741SB, UL 1741SA, UL 1998, UL1699B, IEEA 1547-2018, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-1, California Rule 21				
Features					
DC connection	MC4 connector				
AC connection	OT terminal (750 MCM)				
Display	LCD				
Communication	RS485, Optional: PLC				