

# Solis-(185-255)K-EHV-5G-US

Solis Three Phase US Inverters



## Model:

**600V:** Solis-185K-EHV-5G-US  
Solis-185K-EHV-5G-US-PLUS

**800V:** Solis-255K-EHV-5G-US  
Solis-255K-EHV-5G-US-PLUS

### Efficient

- ▶ 12/14 MPPTs, max. efficiency 99.0% (CEC efficiency 98.5%)
- ▶ 150% DC/AC ratio
- ▶ High power tracking density 60MPPT/MW
- ▶ Compatible with 500W+ bifacial modules

### Safe

- ▶ IP66
- ▶ CA Rule 21 compliant and UL 1741 SA Certified
- ▶ Built-in PID recovery for better module performance
- ▶ Fuse free design, safe and maintenance free
- ▶ Globally recognised branded component for longer life

### Smart

- ▶ Intelligent string monitoring, Smart I-V curve scan
- ▶ Remote firmware upgrade with simple operation

### Economic

- ▶ Power line communication (PLC) (optional)
- ▶ Support "Y" type connection in DC side
- ▶ Support aluminium wire to reduce cost
- ▶ Reserve DC energy storage access

## Datasheet

Model Name	Solis-185K-EHV-5G-US	Solis-185K-EHV-5G-US-PLUS	Solis-255K-EHV-5G-US	Solis-255K-EHV-5G-US-PLUS			
<b>Input DC</b>							
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	14*26 A	12*30 A	14*26 A	12*30 A			
Max. short circuit current	14*40 A	12*50 A	14*40 A	12*50 A			
MPPT number/Max. input strings number	14/28	12/24	14/28	12/24			
<b>Output AC</b>							
Rated output power		185 kW		255 kW			
Max. apparent output power		185 kVA		255 kVA			
Max. output power		185 kW		255 kW			
Rated grid voltage		3Φ/PE, 600 V		3Φ/PE, 800 V			
Rated grid frequency			60 Hz				
Max. output current		178.0 A		184.0 A			
Power Factor		>0.99 (0.8 leading - 0.8 lagging)					
THDi			<3%				
<b>Efficiency</b>							
Max. efficiency			99.0%				
CEC efficiency			98.5%				
<b>Protection</b>							
DC reverse-polarity protection			Yes				
Ground fault monitoring			Yes				
Anti-islanding protection			Yes				
Strings monitoring			Yes				
Integrated AFCI (DC arc-fault circuit protection)			Yes				
I/V Curve scanning			Yes				
Integrated PID recovery			Yes				
<b>General Data</b>							
Dimensions (W*H*D)		46.1*30.3*15.1 in (1170*770*384 mm)					
Weight		249.0 lbs (113 kgs)					
Topology		Transformerless					
Self consumption (night)		<2 W					
Relative humidity		0-100%					
Ambient operating temperature range		-13°F to 140°F (-25°C ~ +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 1741, UL 1741SA, UL 1998, UL1699B, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-1, California Rule 21 Phaes II & III						
<b>Features</b>							
DC connection		MC4 connector					
AC connection		OT terminal (max. 300 mm <sup>2</sup> )					
Display		LCD					
Communication		RS485, Optional: PLC					