

Solis-255K-EHV-5G-PLUS

Solis Three Phase Grid-Tied Inverters

250K models are applicable only in Vietnam, Poland, Brazil and India

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

Efficient

- 12 MPPTs, max. efficiency 99.0%
- > 150% DC/AC ratio
- High power tracking density 47MPPT/MW
- Compatible with 550W+ bifacial modules

Smart

- Night SVG function
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

Safe

- IP66
- Nighttime PID recovery function
- Fuse free design, safe and maintenance free
- Globally recognised branded component for longer life

Economic

- Power line communication (PLC) (optional)
- DC side supports "Y" connector

Models:

Solis-255K-EHV-5G-PLUS



DATASHEET

Models	255K
Input DC	
Max. input voltage	1500 V
Rated voltage	1080 V
Start-up voltage	500 V
MPPT voltage range	480 - 1500 V
Max. input current	12 × 30 A
Max. short circuit current	12 × 50 A
MPPT number / Max. input strings number	12 / 24
Output AC	
Output power	255 kVA@30°C / 235 kVA@40°C / 220 kVA@50°C
Rated grid voltage	3/PE, 800 V
Grid voltage range	640 - 920 V
Rated grid frequency	50 Hz / 60 Hz
Max. output current	184.0 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi	< 3%
Efficiency	
Max. efficiency	99.0%
EU efficiency	98.8%
Protection	
DC reverse-polarity protection	Yes
Short circuit protection	Yes
Output over current protection	Yes
Surge protection	DC Type II / AC Type II
Grid monitoring	Yes
Anti-islanding protection	Yes
Temperature protection	Yes
Strings monitoring	Yes
I/V Curve scanning	Yes
Night time SVG function	Yes
Integrated PID recovery	Yes
Integrated DC switch	Yes
General Data	
Dimensions (W × H × D)	1125 × 770 × 384 mm
Weight	113 kg
Topology	Transformerless
Self-consumption (night)	< 2 W
Operating ambient temperature range	-30 ~ +60°C
Relative humidity	0 - 100%
Ingress protection	IP66
Cooling concept	Intelligent fan-cooling
Max. operation altitude	4000 m
Grid connection standard	EN50549, G99, AS4777.2, VDE0126, IEC61727, VDE4110, CEA 2019
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4
Features	
DC connection	MC4 connector
AC connection	OT terminal (max. 300 mm ²)
Display	LCD
Communication	RS485, Optional: PLC