

Solis-80K-5G

Solis Three Phase Inverters

Efficient

- 9 MPPTs, max. efficiency 98.7%
- > 150% DC/AC ratio
- Compatible with bifacial modules

Smart

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

Safe

- IP66
- Built-in PID recovery for better module performance (optional)
- AFCI protection, proactively reduces fire risk
- Globally recognised branded componentry for longer life

Economic

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

Models:

Solis-80K-5G



360° View



DATASHEET

Solis-80K-5G

Models	80K
Input DC	
Max. input voltage	1100 V
Rated voltage	600 V
Start-up voltage	195 V
MPPT voltage range	180 - 1000 V
Max. input current	9 × 30 A
Max. short circuit current	9 × 40 A
MPPT number / Max. input strings number	9 / 18
Output AC	
Rated output power	80 kW
Max. apparent output power	88 kVA
Max. output power	88 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V
Rated grid frequency	50 Hz / 60 Hz
Rated grid output current	121.6 A / 115.5 A
Max. output current	133.7 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi	< 3%
DC injection current	< 0.5% I _n
Efficiency	
Max. efficiency	98.7%
EU efficiency	98.3%
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
Integrated AFCI (DC arc-fault circuit protection)	Yes ⁽¹⁾
Integrated PID recovery	Optional
Integrated DC switch	Yes
Integrated AC switch	Optional
General Data	
Dimensions (W × H × D)	1050 × 567 × 314.5 mm (with AC switch)
Weight	82 kg
Topology	Transformerless
Self-consumption (night)	< 2 W
Operating ambient temperature range	- 30 ~ +60°C
Relative humidity	0 - 100%
Ingress protection	IP66
Noise emission (typical)	≤ 65 dB(A)
Cooling concept	Intelligent fan-cooling
Max. operation altitude	4000 m
Grid connection standard	IEC 61683, IEC 60068, IEC 61727, IEC 62116, EN 50530, IS 16169/IS 16221(BIS)
Safety / EMC standard	IEC 62109-1/-2, IEC 61000-6-2/-4
Features	
DC connection	MC4 connector
AC connection	OT terminal (max. 185 mm ²)
Display	LCD
Communication	RS485, Optional: S3-WiFi-ST, S3-GRPS-ST, PLC

(1) Activation required.