

## S5-GC80K

# Solis Three Phase Grid-Tied Inverters

### Efficient

- 9 MPPTs, max. efficiency 98.7%
- > 150% DC/AC ratio
- String current up to 16A, perfectly match large current 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:

S5-GC80K



360° View



# DATASHEET

# S5-GC80K

Models	80K
<b>Input DC</b>	
Max. input voltage	1100 V
Rated voltage	600 V
Start-up voltage	195 V
MPPT voltage range	180-1000 V
Max. input current	9*32 A
Max. short circuit current	9*40 A
MPPT number/Max. input strings number	9/18
<b>Output AC</b>	
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% In
<b>Efficiency</b>	
Max. efficiency	98.7%
EU efficiency	98.3%
<b>Protection</b>	
DC reverse-polarity protection	Yes
Short circuit protection	Yes
Output over current protection	Yes
Insulation resistance monitoring	Yes
Residual current detection	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 <sup>(1)</sup>
Integrated PID recovery	Optional
Integrated DC switch	Yes
Integrated AC switch	Optional
<b>General Data</b>	
Dimensions (W*H*D)	1050*567*314.5 mm (with AC switch)
Weight	85 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 redundant 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
<b>Features</b>	
DC connection	MC4 connector
AC connection	OT terminal (max. 185 mm <sup>2</sup> )
Display	LCD
Communication	RS485, Optional: S3-WiFi-ST, S3-GRPS-ST, PLC

(1) Activation required.