

S6-GC(50-75)K-LV

Solis Three Phase Grid-Tied Inverters

Efficient

- 6/8 MPPTs, max. efficiency 98.7%
- > 150% DC/AC ratio
- String current up to 21A, perfectly match large current bifacial modules

Smart

- Supports export power control
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

Safe

- IP66
- AFCI protection, proactively reduces fire risk
- Globally recognised branded componentry for longer life

Economic

- Power line communication (PLC) (optional)
- Night time PID recovery function, increases overall system yield (optional)
- DC side supports "Y" connector

Models:

S6-GC50K-LV

S6-GC60K-LV

S6-GC75K-LV



DATASHEET
S6-GC(50-75)K-LV

Models	50K	60K	75K
Input DC			
Max. input voltage	1100 V		
Rated voltage	450 V		
Start-up voltage	180 V		
MPPT voltage range	160 - 1000 V (Recommend 800V access)		
Max. input current	3 × (42 A / 36 A)	4 × (42 A / 36 A)	
Max. short circuit current	6 × 50 A	8 × 50 A	
MPPT number / Max. input strings number	6 / 12 ⁽¹⁾	8 / 16 ⁽¹⁾	
Output AC			
Rated output power	50 kW	60 kW	75 kW
Max. apparent output power	55 kVA	66 kVA	75 kVA
Max. output power	55 kW	66 kW	75 kW
Rated grid voltage	3/(N)/PE, 220 V / 230 V		
Rated grid frequency	50 Hz / 60 Hz		
Rated grid output current	131.2 A / 125.5 A	157.5 A / 150.6 A	196.8 A / 188.3 A
Max. output current	144.3 A	173.2 A	196.8 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)		
THDi	< 3%		
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 2.0	Optional		
Integrated PID recovery	Optional		
Integrated DC switch	Yes		
Integrated AC switch	Optional		
General Data			
Dimensions (W × H × D)	1014 × 567 × 345 mm		
Weight	90 kg	93 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	IEC 61727, IEC 62116, C10/11, VDE 4105, IEEE 1547		
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4		
Features			
DC connection	MC4 connector		
AC connection	OT terminal (max. 240 mm ²)		
Display	LCD		
Communication	RS485, Optional: Wi-Fi, GPRS, PLC		

(1) One string per MPPT (PV2, PV4, PV6, PV8).