

S5-GC(75-125)K-US
Solis Three Phase Grid-Tied
Inverters

Efficient

- 8/9/10 MPPTs, max. efficiency 98.8% (CEC efficiency 98.3%)
- > 1.5 DC/AC ratio
- String current up to 16A for higher capacity modules

Economic

- DC side supports "Y" connector

Safe

- Type 4X, C5 Anti-Corrosion Level
- External signal control function
- Nighttime PID recovery function
- AFCI protection, proactively reduces fire risk
- High quality components from globally recognized suppliers

Smart

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

Models:

S5-GC75K-US / S5-GC80K-US

S5-GC90K-US / S5-GC100K-US

S5-GC125K-US



S5-GC(75-125)K-US

DATASHEET

Models	75K	80K	90K	100K	125K
Input DC					
Max. input voltage			1000 V		
Rated voltage		600 V			720 V
Start-up voltage			195 V		
MPPT voltage range			180 - 1000 V		
Max. input current	8 × 32 A	9 × 32 A		10 × 32 A	
Max. short circuit current	8 × 50 A	9 × 50 A		10 × 50 A	
MPPT number / Max. input strings number	8 / 16	9 / 18		10 / 20	
Output AC					
Rated output power	75 kW	80 kW	90 kW	100 kW	125 kW
Max. apparent output power	75 kVA	80 kVA	90 kVA	100 kVA	125 kVA
Max. output power	75 kW	80 kW	90 kW	100 kW	125 kW
Rated grid voltage			3Φ/PE, 480 V		
Rated grid frequency			60 Hz		
Max. output current	90.2 A	96.2 A	108.3 A	120.3 A	150.4 A
Power Factor			> 0.99 (0.8 leading - 0.8 lagging)		
THDi			< 3%		
Efficiency					
Max. efficiency	98.7%			98.8%	
CEC efficiency	98.3%			98.2%	
Protection					
DC reverse-polarity protection			Yes		
Surge protection			DC Type II / AC Type II		
Ground fault monitoring			Yes		
Anti-islanding protection			Yes		
Strings monitoring			Yes		
I/V Curve scanning			Yes		
Rapid shutdown			Yes		
Integrated AFCI			Yes		
Integrated PID recovery			Yes		
AC switch			Yes		
General Data					
Dimensions (W × H × D)			41.9 × 22.3 × 13.6 in (1065 × 567 × 344.5 mm)		
Weight		187 lbs (85 kgs)			200 lbs (91 kgs)
Topology			Transformerless		
Self-consumption (night)			< 2 W		
Relative humidity			0 - 100%		
Operating ambient temperature range			-22°F to 140°F (-30°C to 60°C)		
Storage environment			-40°F to 176°F (-40°C to 80°C)		
Ingress protection			TYPE 4X		
Cooling concept			Intelligent fan-cooling		
Max. operation altitude			13,120 ft (4000 m)		
Compliance			UL1741SB, IEEE 1547-2018, UL1699B, UL1998, FCC Part15 ClassB, California Rule 21, Heco Rule 14H, NEC 690.12-2020, CAN/CSA C22.2107.1-1		
Features					
DC connection			MC4 connector		
AC connection			OT Terminal (max. 350 MCM)		
Display			LCD		
Communication			RS485, Optional: Wi-Fi, Cellular		

Ordering guidelines: Determine the basic model and add your desired features from above.
Ex: S5-GC75K-US-APST (Inverter with APS transmitter)