

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⁽¹⁾

Models:

S5-GC75K-US / S5-GC80K-US

S5-GC90K-US / S5-GC100K-US

S5-GC125K-US

Ordering: S5-GC(75-125)K-US

- APST (APS MLRSD Transmitter)
- RSS (Tigo MLRSD Transmitter)
- NEPT (NEP MLRSD Transmitter)



(1) Requires the user to use Solis monitoring

DATASHEET

S5-GC(75-125)K-US

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)