

S5-GC(75-100)K-US

Solis Three Phase US Inverters



360° View

>> Models:

S5-GC75K-US S5-GC90K-US
S5-GC80K-US S5-GC100K-US

Ordering: S5-GC(75-100)K-US

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



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

Safe

- Type 4X, C5 Anti-Corrosion Level
- UL 1741 SA and SB
- Integrated nighttime PID recovery for optimal module performance
- 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*

Economic

- DC side supports "Y" connector
- Support aluminium wire to reduce cost

* Requires the user to use Solis monitoring

DATASHEET
S5-GC(75-100)K-US

Models	75K	80K	90K	100K
Input DC				
Max. input voltage	1000 V			
Rated voltage	600 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
Max. apparent output power	75 kVA	80 kVA	90 kVA	100 kVA
Max. output power	75 kW	80 kW	90 kW	100 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
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			
Integrated PID recovery	Yes			
Rapid shutdown	Yes			
Integrated AFCI (DC arc-fault circuit protection)	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)			
Topology	Transformerless			
Self-consumption (night)	<2 W			
Relative humidity	0-100%			
Operating ambient temperature range	-22°F to 140°F (-30°C ~ +60°C)			
Storage environment	-40°F to 176°F (-40°C to 80°C)			
Ingress protection	TYPE 4X			
Cooling concept	Intelligent redundant fan-cooling			
Max. operation altitude	13,120 ft (4000 m)			
Compliance	UL1741SB, UL1741SA, 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, Ethernet, 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)