

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
- 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⁽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)