SG2K-S/SG2K5-S/SG3K-S

Residential String Inverter

HIGH YIELD
- Industry leading efficiency of 98.2%
- Flexible PV string configurations
- High DC/AC ratio up to 1.3

SAFE AND RELIABLE
- Built-in surge arresters & RCD
- Cutting-edge technology ensures long life time
- High anti-corrosion rating at C5

EASY INSTALLATION
- Unique push-in connectors for time-saving installation
- Mounting plate with built-in level
- Fast and easy commissioning via App or LCD

CIRCUIT DIAGRAM

Efficiency Curve

Type designation | SG2K-S | SG2K5-S | SG3K-S
---|---|---|---
Input (DC) | | | |
Max. PV input voltage | 600 V | | |
Min. PV input voltage / Startup voltage | 90 / 120 V | | |
Nominal input voltage | 360 V | | |
MPP range | 90 V - 560 V | | |
MPP voltage range for nominal power | 210 V - 480 V | 260 V - 480 V | 310 V - 480 V |
No. of MPPTs | 1 | | |
Max. number of PV strings per MPPT | 1 | | |
Max. PV input current | 10 A | | |
Max. current for input connector | 12 A | | |
Max. PV short-circuit current | 12 A | | |
Output (AC) | | | |
Max. AC output power | 2000 VA | 2500 VA | 3000 VA |
Max. AC output current | 11.3 A | 11.7 A | | |
Nominal AC voltage | 230 Vac | | |
AC voltage range | 180 Vac – 276 Vac | | |
Nominal grid frequency | 50 Hz / 60 Hz | | |
Grid frequency range | 45 Hz – 55 Hz / 55 Hz – 65 Hz | | |
Total Harmonic Distortion (THD) | < 3 % (of nominal power) | | |
DC current injection | > 0.99 / 0.8 leading – 0.8 lagging | | |
Power factor | | | |
Feed-in phases / Connection phases | 1 / 1 | | |
Efficiency | 98.2 % / 97.2 % | 98.2 % / 97.5 % | 98.2 % / 97.7 % |
Protection | | | |
PV reverse connection protection | Yes | | |
AC short circuit protection | Yes | | |
Leakage current protection | Yes | | |
Grid monitoring | Yes | | |
PV string current monitoring | Yes | | |
DC switch | Yes* | | |
Overvoltage protection | AC Type II | | |
General Data | | | |
Dimensions (W*H*D) | 300*370*125 mm | | |
Weight | 8.5 kg | | |
Isolation method | Transformerless | | |
Ingress protection rating | IP65 | | |
Night power consumption | < 1 W** | | |
Operating ambient temperature range | -25 °C to 60 °C (40 °C derating) | | |
Allowable relative humidity (non-condensing) | 0 – 100 % | | |
Cooling method | Natural cooling | | |
Max operating altitude | 4000 m (+ 2000 m derating) | | |
Display | LCD | | |
Communication | WiFi / Ethernet (optional) | | |
DC connection type | MC4 (Max. 6 mm²) | | |
AC connection type | Plug and play connector (Max. 6 mm²) | | |
Compliance | IEC62109-1, IEC62109-2, IEC62136, IEC61727, EN 61000-6-2, EN 61000-6-4, VDE-AR-N-4085, CE 0-21, VDE0126-1-1, UTE C15-712, VFR-2014, EN500343, C101, C102, C28/SG2K/S | | |
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*: Devices for Australia are not equipped with DC switches
**: Deluxe Version: < 3W (DC & AC power supply)