

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



SMART MANAGEMENT

- Feature-rich online monitoring via App or Web
- Firmware updates & new monitoring features
- Gain energy flow with Sungrow smart meter



SAFE AND RELIABLE

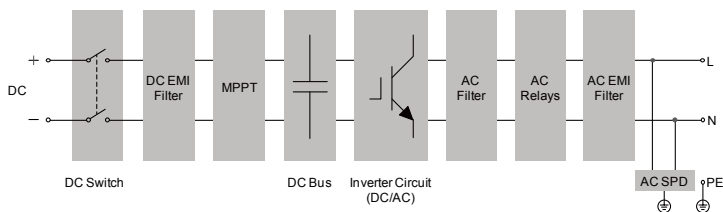
- Built-in surge arresters & RCD
- Cutting-edge technology ensures long life time
- High anti-corrosion rating at C5



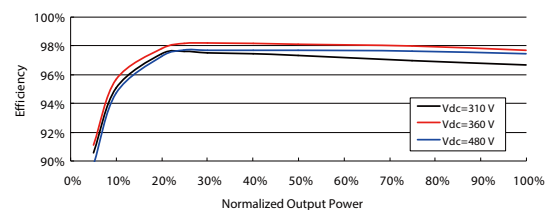
EASY INSTALLATION

- 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 voltage 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) | | | |
| Nominal AC output power | 2000 W | 2500 W | 3000 W |
| Max. apparent AC output power | 2000 VA | 2500 VA | 3000 VA |
| Max. AC output current | 9.1 A | 11.3 A | 13.7 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 | | < 0.5 % (of nominal current) | |
| Power factor | | > 0.99 / 0.8 leading – 0.8 lagging | |
| Feed-in phases / Connection phases | | 1 / 1 | |
| Efficiency | | | |
| Max. efficiency / European 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 | | < 3 W | |
| Operating ambient temperature range | | -25 °C to 60 °C (>45 °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 mm ²) | |
| AC connection type | | Plug and play connector (Max. 6 mm ²) | |
| Compliance | | IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, VDE-AR-N-4105, CEI 0-21, VDE0126-1-1, UTE C15-712, VFR-2014, EN50438, C10/11, G83/2, G59/3 | |
| Compliance | | Active & reactive power control, power ramp rate control | |
| Type designation | SG2K-S | SG2K5-S | SG3K-S |

