

SG3K-D-NI/SG5K-D-NI

Residential Single Phase Inverter

AU



HIGH YIELD

- Higher yield with Max. efficiency 98.4 %, European efficiency 98.0 %
- 12.5 A MPPT current, and compatible with bifacial modules
- Flexible PV string configurations, DC/AC ratio up to 1.4

SMART MANAGEMENT

- Easy local and online monitoring via App or Web
- Export power control with smart energy meter

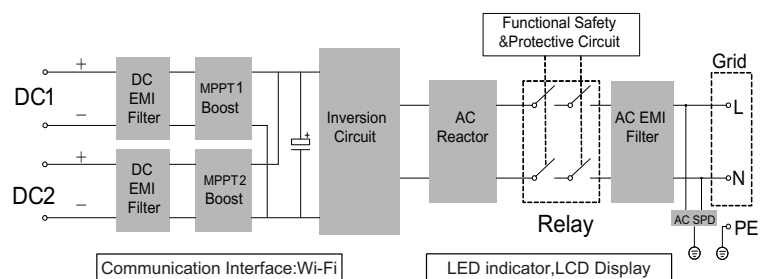
SAFE AND RELIABLE

- Built-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting

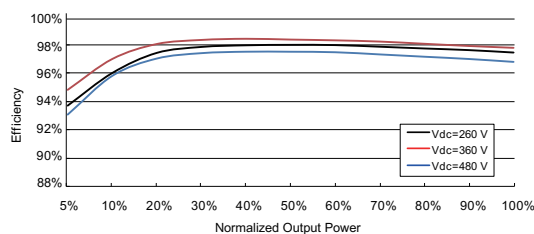
EASY AND USER FRIENDLY

- 11.5 kg compact design, plug and play installation
- Fast commissioning via LCD

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG5K-D-NI)



| Type designation | SG3K-D-NI | SG5K-D-NI |
|---|--|---------------|
| Input (DC) | | |
| Recommended max. PV input power | 4000 W | 6700 W |
| Max. PV input voltage | 600 V | |
| Min. PV input voltage / Startup voltage | 90 V / 120 V | |
| Rated input voltage | 360 V | |
| MPP voltage range | 90 V – 560 V | |
| MPP voltage range for rated power | 160 V – 480 V | 260 V – 480 V |
| No. of MPPTs | 2 | |
| Max. number of PV strings per MPPT | 1 | |
| Max. PV input current | 25 A (12.5 A / 12.5 A) | |
| Max. PV short-circuit current | 40 A (20 A / 20 A) | |
| Output Side Data | | |
| AC output power | 3000 VA | 4999 VA |
| Rated AC output apparent power | 3000 VA | 4999 VA |
| Max. AC output current | 13.7 A | 21.7 A |
| Rated AC voltage | 230 Vac | |
| AC voltage range | 180 Vac – 276 Vac | |
| Rated grid frequency | 50 Hz / 60 Hz | |
| Grid frequency range | 45 Hz – 55 Hz / 55 Hz – 65 Hz | |
| Total harmonic distortion (THD) | < 3 % (of rated power) | |
| Power factor | > 0.99 / 0.8 leading – 0.8 lagging | |
| Feed-in phases / Connection phases | 1 / 1 | |
| Efficiency | | |
| Max. efficiency | 98.4 % | |
| European efficiency | 97.7 % | 98.0 % |
| 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 | No | |
| AFCI | No | |
| 24H loads monitoring | No | |
| Overvoltage protection | AC Type II | |
| General Data | | |
| Dimensions (W*H*D) | 360*390*133 mm | |
| Weight | 11.5 kg | |
| Isolation method | Transformerless | |
| Ingress protection rating | IP65 | |
| Power loss in night mode | < 1W | |
| Operating ambient temperature | -25 °C to 60 °C (>45 °C derating) | |
| Allowable relative humidity | 0 – 100 % | |
| Cooling method | Natural cooling | |
| Max. operating altitude | 4000 m (> 2000 m derating) | |
| Display / Communication | LCD / WLAN | |
| PV connection type | MC4 (max. 6 mm ²) | |
| AC connection type | Plug and play connector (max. 6 mm ²) | |
| Certification | IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, AS/NZS 4777.2:2020 | |
| Grid support | Active & reactive power control, power ramp rate control | |
| Country of manufacture | China | |

