

SG8K3-D

Residential Single Phase String Inverter



HIGH YIELD

- Higher yield with Max. efficiency 98.5 %, European efficiency 98.0 %
- Wide MPPT voltage range



SMART MANAGEMENT

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



SAFE AND DURABLE

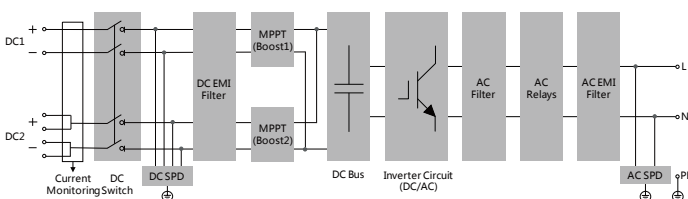
- Built-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting



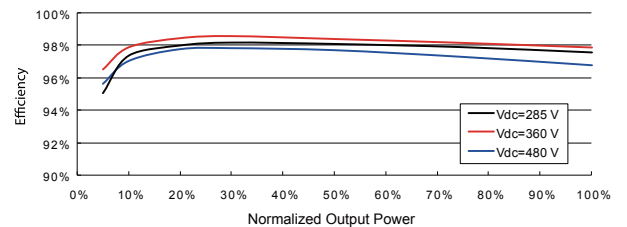
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



| Type designation | SG8K3-D |
|--|---|
| Input (DC) | |
| Max. PV input voltage | 600 V |
| Min. PV input voltage / Startup voltage | 90 V – 120 V |
| Nominal input voltage | 360 V |
| MPP voltage range | 90 V – 540 V |
| MPP voltage range for nominal power | 285 V – 480 V |
| No. of MPPTs | 2 |
| Max. number of PV strings per MPPT | 1 / 2 |
| Max. PV input current | 12.5 A / 25 A |
| Max. current for input connector | 15 A |
| Max. PV short-circuit current | 15 A / 30 A |
| Output (AC) | |
| AC output power | 8300 VA |
| Max. AC output current | 36.1 A |
| Nominal AC voltage | 220 Vac / 240 Vac |
| AC voltage range | 176 Vac – 276 Vac (this may vary with grid standards) |
| 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 | 98.5 % / 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 | Yes |
| Overvoltage protection | DC Type II / AC Type II |
| General Data | |
| Dimensions (W*H*D) | 360*390*148 mm |
| Weight | 15.5 kg |
| Isolation method | Transformerless |
| Ingress protection rating | IP65 |
| Power loss in night mode | < 1 W |
| Operating ambient temperature | -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 / Communication | LCD / Wi-Fi |
| PV connection type | MC4 (Max. 6mm ²) |
| AC connection type | Plug and play connector (Max. 6mm ²) |
| Compliance | IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, ABNT NBR 16149, ABNT NBR 16150 |
| Grid support | Active & reactive power control, power ramp rate control |

