SG3K/3K6/4K/4K6/5K/6K-D
Residential String Inverter

HIGH YIELD
- Industry leading efficiency of 98.4%
- Flexible PV string configurations
- High DC/AC ratio up to 1.3

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

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

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
SG3K-D
SG3K6-D
SG4K-D
SG4K6-D
SG5K-D
SG6K-D

Input (AC)
Max. AC output power
3000 VA
3680 VA
4000 VA
4600 VA
5000 VA
6000 VA

Nominal AC voltage
230 Vac

Max. AC output current
13.7 A
16 A
18.2 A
21 A
22.7 A
27.3 A

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
98.4 %

Max. European efficiency
97.7 %
97.7 %
98.0 %
98.0 %
98.0 %
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
AC Type II

General Data
Dimensions (W*H*D)
360*390*133 mm

Weight
11.5 kg

Isolation method
Transformerless

IP rating
IP65

Night power consumption
< 3 W

Operating ambient temperature range
-25 °C to 60 °C (+45 °C derating)

Allowable relative humidity
0 – 100%

Cooling method
Natural convection

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, IEC62116, IEC6272, EN 60065-6-2, EN 60065-6-3, VDE-AR-N-405, CEI 0-21, VDE-0126-1-1, UL 489, V802-2014, EN50438, C101, C802, C853

SG3K-D SG3K6-D SG4K-D SG4K6-D SG5K-D SG6K-D

*: Devices for Australia are not equipped with DC switches

**: Deluxe Version: < 3W (DC & AC power supply)