# 3.6/5kW String Inverter 1P




## DATASHEET

SUN-3.6K-G05P1-EU-AM2
SUN-5K-G05P1-EU-AM2

www.sunsynk.com
sales@sunsynk.com
customerservices@sunsynk.com

v.2 (08/12/25)

**PLEASE RETAIN FOR FUTURE REFERENCE**

## Product Parameters

### Note

Approvals and certification are subject to change without prior notice. Please confirm the current status with Sunsynk before placing an order.

| Model | SUN-3.6K-G05P1-EU-AM2 | SUN-5K-G05P1-EU-AM2 |
|---|---|---|
| **PV String Input Data** | | |
| Max. PV Input Power | 5.4kW | 7.5kW |
| Max. PV Input Voltage | 550V | |
| Start-Up Voltage | 80V | |
| PV Input Voltage Range | 80-550V | |
| MPPT Voltage Range | 70-500V | |
| Rated PV Input Voltage | 360V | |
| Full Load MPPT Voltage Range | 130-500V | 180-500V |
| Max. Input Short Circuit Current | 27+27A | |
| Max. Operating PV Input Current | 18+18A | |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1 | |
| Max. Inverter Backfeed Current<br>to the Array | 0 | |
| **AC Output Side** | | |
| Rated AC Output Active Power | 3.6kW | 5kW |
| Max. AC Output Apparent Power | 3.96kVA | 5.5kVA |
| Rated AC Output Current | 16.4/15.7A | 22.8/21.8A |
| Max. AC Output Current | 18.0/17.3A | 25.0/24.0A |
| Max. Output Fault Current | 31.4A | 43.6A |
| Max. Output Overcurrent Protection | 75A | |
| Rated Output Voltage/Range | 220/230V 0.85Un-1.1.Un | |
| Grid Connection Form | L+N+PE | |
| Rated Output Grid Frequency/Range | 50/45-55Hz 60/55-65Hz | |
| Power Factor Adjustment Range | 0.8 Leading - 0.8 Lagging | |
| Total Current Harmonic Distortion THDi | <3% | |
| DC Injection Current | <0.5%In | |
| **Efficiency** | | |
| Max. Efficiency | 97.3% | 97.5% |
| Euro Efficiency | 96.9% | 97.0% |
| MPPT Efficiency | >99% | |

| Equipment Protection | |
|---|---|
| Integrated | DC Reverse Polarity Protection, AC Output Over-Current Protection, AC Output Over-Voltage Protection, AC Output Short Circuit Protection, Thermal Protection, DC Terminal Insulation Impendance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (AFCI) (Optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, Over-Voltage Load Drop Protection, Residual Current (RCD) Detection |
| Surge Protection Level | TYPE II(DC), TYPE II(AC) |
| **Interface** | |
| Communication Interface | RS485/RS232 |
| Monitor Mode | GPRS/WIFI/Bluetooth/4G/LAN (Optional) |
| Display | LCD+LED |
| **General Data** | |
| Operating Temperature Range | -25 to +60°C, >45°C Derating |
| Permissible Ambient Humidity | 0-100% |
| Permissible Altitude | 3000m |
| Noise | ≤35dB |
| Ingress Protection (IP) Rating | IP65 |
| Inverter Topology | Non-Isolated |
| Over Voltage Category | OVC II(DC), OVC III(AC) |
| Cabinet Size (WxHxD) | 305x280x180mm (Excluding Connectors and Brackets) |
| Weight | 7.7kg |
| Warranty | See website for Warranty details |
| Type of Cooling | Natural Cooling |
| Grid Regulation | Approvals and certifications are subject to change without prior notice. Please confirm the current status with Sunsynk before placing an order. |
| Safety EMC/Standard | Approvals and certifications are subject to change without prior notice. Please confirm the current status with Sunsynk before placing an order. |



## Contact Us


**Call** +44 151 832 4300 **Email** sales@sunsynk.com **Website** www.sunsynk.com

**Address**

**HK** Room 702-704, 7/F Texwood Plaza, 6 How Ming Street, Kwun Tong, Kowloon, Hong Kong

**UK** Sunsynk UK Ltd, 17 Turnstone Business Park, Mulberry Avenue, Widnes, Cheshire, WA8 0WN

**SA** Unit 2, 3 & 4, 80 Highview Blvd, Ferndale, Randburg, 2160, South Africa

**NL** Sunsynk NL BV, Henri Wijnmalenweg 8, 5657 EP Eindhoven, Netherlands

**AU** Level 1, 982-988 Wellington Street, West Perth WA 6005, Australia

**ES** Tafetana, 32 P.I. Las Andoriñas 38639 Las Chafiras Santa Cruz de Tenerife

**US** 100 S. Ashley Drive, Suite 600, Tampa, Florida, 33602, United States of America