# Single Phase String Inverter

## SUN- 5 K-G



2 MPP trackers, Max. eÿcienc y up to 97.5%

**F** Zero export application, VSG application

String intelligent monitoring (optional)

Wide output voltage range

**PID** Anti-PID function (Optional)

**80** Low start-up voltage of 80V

Build in AFCI

Rapid Shutdown system (Optional)

## Technical Data

| Model | SUN-5K-G |
|---|---|
| **Input Side** | |
| Max. DC Input Power (kW) | 6.5 |
| Max. DC Input Voltage (V) | 550 |
| Start-up DC Input Voltage (V) | 80 |
| MPPT  Operating Range (V) | 70~500 |
| Max. DC Input Current (A) | 13+13 |
| Max. Short Circuit Current (A) | 19.5+19.5 |
| Number of MPPT / Strings per MPPT | 2/1 |
| **Output Side** | |
| Rated Output Power (kW) | 5 |
| Max. Active Power (kW) | 5.5 |
| Nominal Output Voltage / Range (V) | L/N/PE  220V/187V-242V, 230V/ 195.5V-253V  (Optional) |
| Rated Grid Frequency (Hz) | 50 / 60 (Optional) |
| Operating Phase | Single phase |
| Rated AC Grid Output Current (A) | 21 |
| Max. AC Output Current (A) | 23.9 |
| Output Power Factor | 0.8 leading to 0.8 lagging |
| Grid Current THD | <3% |
| DC Injection Current (mA) | <0.5% |
| Grid Frequency Range | 47~52 or 57~62 (Optional) |
| **Efficiency** | |
| Max. Eÿciency | 97.5% |
| Euro Eÿciency | 97.3% |
| MPPT Eÿciency | >99% |
| **Protection** | |
| DC Reverse-Polarity Protection | Yes |
| AC Short Circuit Protection | Yes |
| AC Output Overcurrent Protection | Yes |
| Output Overvoltage Protection | Yes |
| Insulation Resistance Protection | Yes |
| Ground Fault Monitoring | Yes |
| Anti-islanding Protection | Yes |
| Temperature Protection | Yes |
| Integrated DC Switch | Yes |
| Remote software upload | Yes |
| Remote change of operating parameters | Yes |
| Surge protection | DC Type II / AC Type II |
| **General Data** | |
| Size (mm) | 330W×323H×190D |
| Weight (kg) | 7.5 |
| Topology | Transformerless |
| Internal Consumption | <1W (Night) |
| Running Temperature | -25~65℃, >45℃ derating |
| Ingress Protection | IP65 |
| Noise Emission (Typical) | <25 dB |
| Cooling Concept | Natural cooling |
| Max. Operating Altitude Without Derating | 2000m |
| Designed Lifetime | >20 years |
| Grid Connection Standard | CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11 |
| Operating Surroundings Humidity | 0-100% |
| Safety EMC / Standard | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 |
| **Features** | |
| DC Connection | MC-4 mateable |
| AC Connection | IP65 rated plug |
| Display | LCD1602 |
| Interface | RS485/RS232/Wifi/LAN |