







# Hybrid Inverter

SUN- 7.6 / 8 K-SG05LP1-AU



-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
-  Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 190A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

## Technical Data

| Model                                | SUN-7.6K-SG05LP1-AU   |  | SUN-8K-SG05LP1-AU |  |
|--------------------------------------|---|--|-------------------|--|
| Battery Input Data                   |   |  |                   |  |
| Battery Type                         | Lead-acid or Li-Ion   |  |                   |  |
| Battery Voltage Range (V)            | 40~60   |  |                   |  |
| Max. Charging Current (A)            | 190   |  | 190               |  |
| Max. Discharging Current (A)         | 190   |  | 190               |  |
| External Temperature Sensor          | Yes   |  |                   |  |
| Charging Curve                       | 3 Stages / Equalization   |  |                   |  |
| Charging Strategy for Li-Ion Battery | Self-adaption to BMS  |  |                   |  |
| PV String Input Data                 |   |  |                   |  |
| Max. DC Input Power (W)              | 9880  |  | 10400             |  |
| Rated PV Input Voltage (V)           | 370 (125~500)   |  |                   |  |
| Start-up Voltage (V)                 | 125   |  |                   |  |
| MPPT Voltage Range (V)               | 150-425   |  |                   |  |
| Full Load DC Voltage Range (V)       | 200-425   |  |                   |  |
| PV Input Current (A)                 | 26+26   |  |                   |  |
| Max. PV ISC (A)                      | 34+34   |  |                   |  |
| Number of MPPT / Strings per MPPT    | 2/1+1   |  |                   |  |
| AC Output Data                       |   |  |                   |  |
| Rated AC Output and UPS Power (VA)   | 7600  |  | 8000              |  |
| Max. AC Output Power (W)             | 7600  |  | 8000              |  |
| AC Output Rated Current (A)          | 33/31.7   |  | 34.8/33.3         |  |
| Max. AC Current (A)                  | 33/31.7   |  | 34.8/33.3         |  |
| Max. Continuous AC Passthrough (A)   | 50  |  |                   |  |
| Peak Power (off grid)                | 2 time of rated power, 10 S   |  |                   |  |
| Power Factor                         | 0.8 leading to 0.8 lagging  |  |                   |  |
| Output Frequency and Voltage         | 50Hz; L/N/PE 230V/ 195.5V-253V 240V/204V-264V   |  |                   |  |
| Grid Type                            | Single Phase  |  |                   |  |
| DC injection current (mA)            | THD<3% (Linear load<1.5%)   |  |                   |  |
| Efficiency                           |   |  |                   |  |
| Max. Efficiency                      | 97.60%  |  |                   |  |
| Euro Efficiency                      | 97.00%  |  |                   |  |
| MPPT Efficiency                      | 99.90%  |  |                   |  |
| Protection                           |   |  |                   |  |
| Integrated                           | PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection |  |                   |  |
| Output Over Voltage Protection       | DC Type II/AC Type III  |  |                   |  |
| Certifications and Standards         |   |  |                   |  |
| Grid Regulation                      | AS/NZS 4777.2   |  |                   |  |
| Safety EMC / Standard                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2  |  |                   |  |
| General Data                         |   |  |                   |  |
| Operating Temperature Range (°C)     | -40~60°C, >45°C derating  |  |                   |  |
| Cooling                              | Natural cooling   |  |                   |  |
| Noise (dB)                           | <30 dB  |  |                   |  |
| Communication with BMS               | RS485; CAN  |  |                   |  |
| Weight (kg)                          | 20.5  |  |                   |  |
| Size (mm)                            | 330W x 580H x232D   |  |                   |  |
| Protection Degree                    | IP65  |  |                   |  |
| Installation Style                   | Wall-mounted  |  |                   |  |
| Warranty                             | 5 years   |  |                   |  |