



# SINGLE-PHASE HYBRID INVERTER




## DATASHEET

SUNSYNK-3.6K-SG03LP1-AU  
SUNSYNK-5K-SG03LP1-AU

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v.23 (24/04/24)

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FUTURE REFERENCE

| Model                                       | SUNSYNK-3.6K-SG03LP1-AU         | SUNSYNK-5K-SG03LP1-AU |
|---|---------------------------------|-----------------------|
| <b>Battery Input Data</b>                   |                                 |                       |
| Battery Type                                | Lead-acid or Li-Ion             |                       |
| Battery Voltage Range                       | 48Vd.c (40Vd.c ~ 60Vd.c)        |                       |
| Max. Charging/Discharging Current           | 90Ad.c (max.)                   | 120Ad.c (max.)        |
| Charging Curve                              | 3 Stages / Equalization         |                       |
| External Temperature Sensor                 | Yes                             |                       |
| Charging Strategy for Li-Ion Battery        | Self-adaption to BMS            |                       |
| <b>PV String Input Data</b>                 |                                 |                       |
| Max. DC Input Power                         | 4680W                           | 6500W                 |
| PV Input Voltage                            | 370V (125V~500V)                |                       |
| MPPT Range                                  | 150~425V                        |                       |
| Full Load DC Voltage Range                  | 300~425V                        |                       |
| Start-up Voltage                            | 125V                            |                       |
| PV Input Current                            | 13A + 13A                       |                       |
| Max PV Isc                                  | 19.5A+19.5A                     |                       |
| Max. inverter backfeed current to the array | 0A                              |                       |
| No. of MPPT Trackers                        | 2                               |                       |
| No. of Strings Per MPPT Tracker             | 1+1                             |                       |
| <b>AC Output Data</b>                       |                                 |                       |
| Rated AC Output and UPS Power               | 3600VA                          | 5000VA                |
| Max. AC Output Power                        | 3600W                           | 5000W                 |
| Peak Power (Off-Grid)                       | 2 times of rated power, 10s     |                       |
| AC Output Rated Current                     | 15.7A                           | 21.8A                 |
| Max. AC Current                             | 15.7A                           | 21.8A                 |
| Inrush Current                              | <10A                            |                       |
| Max. Continuous AC Passthrough              | 35A                             |                       |
| Max. Output Fault Current                   | 70A 10us                        |                       |
| Max. Output Overcurrent Protection          | 36                              | 50                    |
| Power Factor                                | 0.8 leading to 0.8 lagging      |                       |
| Output Frequency and Voltage                | 50/60Hz; 230V/240V 0.85Un-1.1Un |                       |
| Grid Type                                   | Single Phase                    |                       |
| Total Harmonic Distortion (THD)             | <3% (of nominal power)          |                       |
| DC Current Injection                        | <0.5% In                        |                       |
| <b>Efficiency</b>                           |                                 |                       |
| Max. Efficiency                             | 97.60%                          |                       |
| Euro Efficiency                             | 96.50%                          |                       |
| MPPT Efficiency                             | >99%                            |                       |

| Protection                          |  |
|-------------------------------------|--|
| Integrated                          | PV Input Lightning Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection |
| Integrated (Active Frequency Shift) | Anti-islanding Protection  |
| Surge Protection                    | DC Type II / AC Type II  |
| Over Voltage Category               | DC Type II / AC Type III   |
| Protection Level                    | Class I  |
| Topology                            | Non-isolated   |
| Certifications and Standards        |  |
| Grid Regulation                     | AS/NZS 4777.2  |
| EMC/Safety Regulation               | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2   |
| General Data                        |  |
| Operating Temperature Range         | -40~60 °C, >45 °C Derating   |
| Cooling                             | Smart cooling  |
| Noise                               | <30 dB   |
| Communication with BMS              | RS485; CAN   |
| Net Weight                          | 22.5kg   |
| Gross Weight                        | 27.5kg   |
| Cabinet size                        | 330W×580H×232D mm (Excluding connectors and brackets)  |
| Protection Degree                   | IP65   |
| Installation Style                  | Wall-mounted   |
| Warranty                            | 5 years  |

## Importer

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