

Residential Grid - Tied PV Inverter

ESG 1-3kW

1K-SM/1.5K-SM/2K-SM/3K-SM

EnSmart can provide a solution to generate your own electricity and can power your own home. The installation capacity of this PV System ranges from 1kW to 5kW and connected to the 220VAC public grid.



High Efficiency

- Max. PV voltage up to 500V
- High efficiency up to 97.6%

Easy Installation

- Simple O&M
- WiFi/GPRS Plug optional

Reliable

- DC/AC surge protection
- IP65 protection

Technical Specifications

| Model | ESG-1K-SM | ESG-1.5K-SM | ESG-2K-SM | ESG-3K-SM |
|-------------------------------------|-----------------------------------|-------------|--------------|------------|
| INPUT | | | | |
| Max. DC Voltage / Rated Voltage | 500Vdc / 380Vdc | | | |
| Mppt Voltage Range | 90~490Vdc | | 100~490Vdc | |
| Full Load MPPT Voltage Range | 105~400Vdc | 145~400Vdc | 190~400Vdc | 240~400Vdc |
| Min. / Start DC Voltage | 90 / 100Vdc | | 120 / 150Vdc | |
| Number of MPPT | 1 | | | |
| Strings per MPPT | 1 | | | |
| Max. Input Current per MPPT | 11A | | 13A | |
| OUTPUT | | | | |
| Max. AC Output Power | 1000W | 1500W | 2000W | 3000W |
| Rated AC Voltage | 230Vac | | | |
| AC Voltage Range | 230Vac±20% | | | |
| Rated AC Grid Frequency | 50 / 60Hz | | | |
| AC Grid Frequency Range | 50 / 60Hz (±5Hz) | | | |
| Max. Output Current | 4.5A | 7A | 9A | 14A |
| Power Factor | 0.9 leading ~0.9 lagging | | | |
| THDi | <3% | | | |
| AC Connection | LN+PE | | | |
| Topology | Transformer-less | | | |
| EFFICIENCY | | | | |
| Max. Efficiency | 96.5% | | 97.6% | |
| Euro Efficiency | 96% | | 97% | |
| Standby Consumption | <5W | | | |
| PROTECTION DEVICE | | | | |
| AC Leakage Current Fault Protection | Yes | | | |
| Ground Fault Protection | Yes | | | |
| Anti-islanding Protection | Yes | | | |
| DC Overvoltage Protection | Yes | | | |
| DC Surge Protection | Yes | | | |
| AC Surge Protection | Yes | | | |
| DC Reverse-polarity Protection | Yes | | | |
| ENVIRONMENT | | | | |
| Operating Temperature Range | -25°C~+60°C | | | |
| Noise Emission (Typical) | <25dB | | | |
| Cooling Type | Natural cooling | | | |
| Protection Rating | IP65 | | | |
| FEATURES | | | | |
| LCD Display | Yes | | | |
| Interfaces | RS485 | | | |
| Optional | DC Switch / WiFi Plug / GPRS Plug | | | |
| PHYSICAL | | | | |
| Dimensions WxDxH (mm) | 264 / 326 / 127 | | | |
| Weight (kg) | 7.6 | 8.1 | 8.6 | |

Highlights



EFFICIENT
HIGHER REVENUE



EASY
INSTALLATION



SAFE AND
RELIABLE