

EV Charging Single Phase Inverter

for Australia

SE5000H



INVERTERS

2-in-1 EV Charger and Solar Inverter, Speeds Up Installation and EV Charging

- Combines solar and grid power for faster EV charging
- Maximises self-consumption and optimises use of renewable energy
- An EV-ready solution, futureproofed for new EV purchase or replacement
- Small, lightweight and easy to install indoors or outdoors
- Record-breaking 99% efficiency, powered by HD-wave technology
- Designed to work with SolarEdge power optimisers
- Built-in module-level monitoring
- Flexible selection of charger cable types and lengths

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INVERTER SPECIFICATIONS:

| SE5000H | | |
|---|---|-----|
| OUTPUT | | |
| Rated AC Power Output | 5000 | VA |
| Max. AC Power Output | 5000 | VA |
| AC Output Voltage (Nominal) | 220 / 230 | Vac |
| AC Output Voltage Range | 184 - 264.5 | Vac |
| AC Frequency (Nominal) | 50 / 60 ± 5 | Hz |
| Maximum Continuous Output Current | 23 | A |
| Total Harmonic Distortion (THD) | < 3 | % |
| Power Factor | 1, adjustable -0.8 to 0.8 | |
| Utility Monitoring, Islanding Protection, Country Configurable Thresholds | Yes | |
| INPUT | | |
| Maximum DC Power | 7750 | W |
| Transformer-less, Ungrounded | Yes | |
| Maximum Input Voltage | 480 | Vdc |
| Nominal DC Input Voltage | 380 | Vdc |
| Maximum Input Current | 13.5 | Adc |
| Reverse-Polarity Protection | Yes | |
| Ground-Fault Isolation Detection | 600k Ω Sensitivity | |
| Maximum Inverter Efficiency | 99.2 | % |
| European Weighted Efficiency | 99 | % |
| Nighttime Power Consumption | < 2.5 | W |
| ADDITIONAL FEATURES | | |
| Supported Communication Interfaces | RS485, Ethernet, ZigBee for Smart Energy ⁽¹⁾ (optional), Wi-Fi (requires antenna) ⁽²⁾ , Cellular (optional) | |
| Smart Energy Management | Export Limitation and Excess Solar Charging ⁽³⁾ | |
| Inverter Commissioning | with the SetApp mobile application using built-in Wi-Fi access point for local connection | |
| STANDARD COMPLIANCE | | |
| Safety | IEC62109, AS/NZS3100 | |
| Grid Connection Standards | AS/NZS4777:2015 | |
| Emissions | IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, FCC Part 15 Class B | |
| INSTALLATION SPECIFICATIONS | | |
| AC Output Conduit Size / Wire cross section | 25mm Maximum / 1-13 mm ² | |
| DC Input Conduit Size / # of Strings / Wire cross section | 25mm Maximum / 1-2 strings / 1-13 mm ² | |
| Dimensions with Connection Unit with Safety Switch (HxWxD) | 450 x 370 x 174 | mm |
| Weight with Connection Unit with Safety Switch | 11.4 | kg |
| Noise | <25 | dBA |
| Cooling | Natural Convection | |
| Operating Temperature Range | -40 to +60 ⁽⁴⁾ | °C |
| Protection Rating | IP65 — Outdoor and Indoor | |

⁽¹⁾ For more information refer to: <https://www.solaredge.com/sites/default/files/se-zigbee-plug-in-wireless-communication-for-setapp-datasheet-au.pdf>

⁽²⁾ Wi-Fi connectivity requires an external antenna. For more information refer to: <https://www.solaredge.com/sites/default/files/se-wifi-zigbee-antenna-datasheet.pdf>

⁽³⁾ Import/Export meter is required for Export Limitation and for controlled Excess Solar charging

⁽⁴⁾ Full power up to at least 50°C/122°F. For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf>

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EV CHARGER AND EV CHARGER CABLE SPECIFICATIONS:

| OUTPUT — AC (EV CHARGER) | | |
|--|---|--------|
| Charging Mode | AC Level 2 / Mode 3 | |
| Minimum Charge Rate ⁽⁵⁾ | 1.5 | kW |
| Rated AC Power Output (grid & PV) ⁽⁶⁾ | 7400 | W |
| Nominal AC Output Voltage | 230 | Vac |
| Nominal AC Frequency | 50 / 60 | Hz |
| Maximum Continuous Output Current @230V (grid & PV) | 32 | Aac |
| Residual Current Detector (AC) | 30 | mA rms |
| ADDITIONAL FEATURES | | |
| EV Charger Status LEDs, Fault Indicator | Yes | |
| EV Charger Ground Connection Monitoring | Yes, continuous | |
| EV Charger Configuration | Via the monitoring app; Ethernet or Wi-Fi connection is required ⁽⁷⁾ | |
| EV Charger Unplugging Detection | Yes, current termination according to IEC62196 | |
| STANDARD COMPLIANCE | | |
| Safety | IEC 61851, IEC 62752:2016 | |
| EV Charger | IEC 62196 | |
| INSTALLATION SPECIFICATIONS | | |
| EV Charger Connector | IEC 62196 Type 1 or Type 2 | |
| EV Charger Cable Length ⁽⁸⁾ | 7.6 (4.5 option) | m |
| EV Charger Cable Weight | 5.7 (3.5 for 4.5m option) | kg |
| EV Charger Cable Operating Temperature Range | -30 to +50 | |
| Protection Rating (connected to EV or with dust cap) | IP54 | |

⁽⁵⁾ Minimum charge rate is in compliance with IEC61851-1 and J1772™ FEB2016 standards.

⁽⁶⁾ Minimum charge rate 1.5kW

⁽⁷⁾ Cellular connection may be used; requires a SIM card with a 1GB data plan that should be purchased from a cellular provider

⁽⁸⁾ EV charger cable ordered separately