

EV Charging Single Phase Inverter

for North America

SE3800H-US / SE7600H-US



INVERTERS

Optimized installation with HD-Wave technology and EV Charger

- Specifically designed to work with power optimizers
- Record-breaking efficiency
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Extremely small and easy to install outdoors or indoors
- EV charger cable and holder ordered separately for flexible cable length selection
- Integrated Level 2 EV charger with solar boost mode charging (grid & PV)
- Built-in module-level monitoring
- Optional: Revenue grade data, ANSI C12.20 Class 0.5 (0.5% accuracy)

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INVERTER SPECIFICATIONS:

| | SE3800H-US | SE7600H-US | |
|---|---|-------------|---------|
| OUTPUT | | | |
| Rated AC Power Output | 3800 | 7600 | VA |
| Max. AC Power Output | 3800 | 7600 | VA |
| AC Output Voltage Min.-Nom.-Max. | 211 - 240 - 264 | | Vac |
| AC Frequency (Nominal) | 59.3 - 60 - 60.5 ⁽¹⁾ | | Hz |
| Maximum Continuous Output Current | 16 | 32 | A |
| GFDI Threshold | 1 | | A |
| Utility Monitoring, Islanding Protection, Country Configurable Thresholds | Yes | | |
| INPUT | | | |
| Maximum DC Power | 5900 | 11800 | W |
| Transformer-less, Ungrounded | Yes | | |
| Maximum Input Voltage | 480 | | Vdc |
| Nominal DC Input Voltage | 380 | 400 | Vdc |
| Maximum Input Current | 10.5 | 20 | Adc |
| Max. Input Short Circuit Current | 45 | | Adc |
| Reverse-Polarity Protection | Yes | | |
| Ground-Fault Isolation Detection | 600k Ω Sensitivity | | |
| Maximum Inverter Efficiency | 99.2 | | % |
| CEC Weighted Efficiency | 99 | | % |
| Nighttime Power Consumption | < 2.5 | | W |
| ADDITIONAL FEATURES | | | |
| Supported Communication Interfaces | RS485, Ethernet, ZigBee (optional), Cellular (optional) | | |
| Smart Energy Management | Export Limitation and Excess Solar Charging ⁽²⁾ | | |
| Revenue Grade Data, ANSI C12.20 | Optional ⁽³⁾ | | |
| Rapid Shutdown - NEC 2014 and 2017 690.12 | Automatic Rapid Shutdown upon AC Grid Disconnect | | |
| STANDARD COMPLIANCE | | | |
| Safety | UL1741, UL1741 SA, UL1699B, CSA C22.2, Canadian AFCl according to T.I.L. M-07 | | |
| Grid Connection Standards | IEEE1547, Rule 21, Rule 14 (HI) | | |
| Emissions | FCC Part 15 Class B | | |
| INSTALLATION SPECIFICATIONS | | | |
| AC Output Conduit Size / AWG Range | 3/4" minimum / 20-4 AWG | | |
| DC Input Conduit Size / # of Strings / AWG Range | 3/4" minimum / 1-2 strings / 14-6 AWG | | |
| Dimensions with Safety Switch (HxWxD) | 17.7 x 14.6 x 6.8 / 450 x 370 x 174 | | in / mm |
| Weight with Safety Switch | 22 / 10 | 26.2 / 11.9 | lb / kg |
| Noise | < 25 | <50 | dBA |
| Cooling | Natural Convection | | |
| Operating Temperature Range | -13 to +140 / -25 to +60 ⁽⁴⁾ (-40°F / -40°C option) ⁽⁵⁾ | | °F / °C |
| Protection Rating | NEMA 4X (Inverter with Safety Switch) | | |

⁽¹⁾ For other regional settings please contact SolarEdge support

⁽²⁾ Import/Export meter is required for Export Limitation and for controlled Excess Solar charging

⁽³⁾ Revenue grade inverter P/N: SExxxH-US000NNW2

⁽⁴⁾ For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf>

⁽⁵⁾ -40°C version P/N: SExxxH-US000NNV4

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EV CHARGER AND EV CHARGER CABLE SPECIFICATIONS:

| OUTPUT — AC | | |
|--|---|---------|
| Charging Level | AC Level 2 Connection to the SolarEdge monitoring platform is required for first EV charging | |
| Rated AC Power Output (grid & PV) | 9600 | W |
| Nominal AC Output Voltage | 240 | Vac |
| Nominal AC Frequency | 60 | Hz |
| Maximum Continuous Output Current @240V (grid & PV) | 40 | Aac |
| Ground Fault Detection Threshold | 5 | mA |
| ADDITIONAL FEATURES | | |
| EV Charger Status LEDs, Fault Indicator | Yes | |
| EV Charger Unplugging Detection | Yes, current termination according to SAE J1772 | |
| EV Charger Ground Connection Monitoring | Yes, continuous | |
| EV Charger Configuration | Via the monitoring app; Ethernet or ZigBee connection is required ⁽⁶⁾ | |
| STANDARD COMPLIANCE | | |
| Safety | UL2594, UL2231-1, UL2231-2, NEC Article 625 compliant | |
| EV Charger | SAE J1772-2009 | |
| INSTALLATION SPECIFICATIONS | | |
| EV Charger Connector | SAE J1772-2009 | |
| EV Charger Cable Length ⁽⁷⁾ | 25 / 7.6 | ft / m |
| EV Charger Cable Weight | 12.5 / 5.7 | lb / kg |
| EV Charger Cable Operating Temperature Range | -22 to 122 / -30 to +50 | °F / °C |
| Protection Rating (connected to EV or with dust cap) | NEMA 3R | |

⁽⁶⁾ Cellular connection may be used; requires a SIM card with a 50MB data plan that should be purchased from a cellular provider; a SolarEdge data plan supports activation only

⁽⁷⁾ EV charger cable ordered separately