Single Phase Energy Hub Inverter with Prism Technology

For North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US⁽¹⁾



HOME BACKUP

Optimized battery storage with HD-Wave technology

- Record-breaking 99% weighted efficiency with 200% DC oversizing
- Small, lightweight, and easy to install
- Modular design, future ready with optional upgrades to:
 - DC-coupled storage for full or partial home backup
 - Built-in consumption monitoring
 - Direct connection to the SolarEdge smart EV charger

- Multi-inverter, scalable storage solution
 - With enhanced battery power up to 10kW
- Integrated arc fault protection and rapid shutdown for NEC 2014, NEC 2017 and NEC 2020, per article 690.11 and 690.12
- Embedded revenue grade production data, ANSI C12.20 Class 0.5



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| | SE3000H-US | SE3800H-US | SE6000H-US | SE7600H-US | SE10000H-US | SE11400H-US | UNIT | | | |
|---|---------------------------------|----------------------------|----------------------------|-----------------|-------------|------------------------------|------|--|--|--|
| OUTPUT - AC ON GRID | | | | | | | | | | |
| Rated AC Power | 3000 | 3800 @ 240V 3300 @ 208V | 6000 @ 240V 5000 @ 208V | 7600 | 10000 | 11400 @ 240V 10000 @ 208V | W | | | |
| Maximum AC Power Output | 3000 | 3800 @ 240V 3300 @ 208V | 6000 @ 240V 5000 @ 208V | 7600 | 10000 | 11400 @ 240V 10000 @ 208V | W | | | |
| AC Frequency Range (min - nom - max) | 59.3 - 60 - 60.5 ⁽²⁾ | | | | | | | | | |
| Maximum Continuous Output Current @ 240V | 12.5 | 16 | 25 | 32 | 42 | 47.5 | А | | | |
| Maximum Continuous Output Current @ 208V | - | 16 | 24 | - | - | 48.5 | Α | | | |
| GFDI Threshold | 1 | | | | | | | | | |
| Total Harmonic Distortion (THD) | <3 | | | | | | | | | |
| Power Factor | 1, adjustable -0.85 to 0.85 | | | | | | | | | |
| Utility Monitoring, Islanding Protection, Country Configurable Thresholds | Yes | | | | | | | | | |
| Charge Battery from AC (if allowed) | Yes | | | | | | | | | |
| Typical Nighttime Power Consumption | <2.5 | | | | | | | | | |
| OUTPUT - AC BACKUP(3) | | | | | | | | | | |
| Rated AC Power in Backup Operation ⁽⁴⁾ | 3000 | 3800 7600* | 6000 | 7600 10300* | 10000 | 10300 | W | | | |
| AC L-L Output Voltage Range in Backup | 211 - 264 | | | | | | | | | |
| AC L-N Output Voltage Range in Backup | 105 - 132 | | | | | | | | | |
| AC Frequency Range in Backup (min - nom - max) | 55 - 60 - 65 | | | | | | | | | |
| Maximum Continuous Output Current in Backup Operation | 12.5 | 16 32* | 25 | 32 43* | 42 | 43 | А | | | |
| GFDI | | | 1 | | | | Α | | | |
| THD | <5 | | | | | | | | | |
| OUTPUT - SMART EV CHARGER AC | | | | | | | % | | | |
| Rated AC Power | 9600 | | | | | | | | | |
| AC Output Voltage Range | 211 - 264 | | | | | | | | | |
| On-Grid AC Frequency Range (min - nom - max) | 59.3 - 60 - 60.5 | | | | | | | | | |
| Maximum Continuous Output Current @240V (grid, PV and battery) | 40 | | | | | | | | | |
| INPUT - DC (PV AND BATTERY) | | | | | | | | | | |
| Transformer-less, Ungrounded | Yes | | | | | | | | | |
| Max Input Voltage | 480 | | | | | | | | | |
| Nom DC Input Voltage | 380 | | | | | | | | | |
| Reverse-Polarity Protection | Yes | | | | | | | | | |
| Ground-Fault Isolation Detection | 600kΩ Sensitivity | | | | | | | | | |
| INPUT - DC (PV) | | | | | | | | | | |
| Maximum DC Power @ 240V | 6000 | 7600 15200* | 12000 | 15200 22800* | 22000 | 22800 | W | | | |
| Maximum DC Power @ 208V | = | 6600 | 10000 | = | - | 20000 | W | | | |
| Maximum Input Current ⁽⁵⁾ @ 240V | 8.5 | 10.5 20* | 16.5 | 20 31* | 27 | 31 | Adc | | | |
| Maximum Input Current ⁽⁵⁾ @ 208V | - | 9 | 13.5 | - | - | 27 | Adc | | | |
| Max. Input Short Circuit Current | 45 | | | | | | | | | |
| Maximum Inverter Efficiency | 99 99.2 | | | | | | | | | |
| CEC Weighted Efficiency | 99 @ 240V 98.5 @ 208V | | | | | | | | | |
| 2-pole Disconnection | Yes | | | | | | | | | |

^{*} Supported with PN SExxxxH-USMMxxxxxx or SExxxxH-USMNxxxxxx

⁽¹⁾ These specifications apply to inverters with part numbers SExxxxH-USSMxxxxx or SExxxxH-USSNxxxx and connection unit model number DCD-1PH-US-PxH-F-x

⁽²⁾ For other regional settings please contact SolarEdge support
(3) Not designed for standalone applications and requires AC for commissioning. Backup functionality is only supported for 240V grid
(4) Rated AC power in Backup Operation are valid for installations with multiple inverters. For a single backup inverter operation, rated AC power in Backup is 90% of the value stated

⁽⁵⁾ A higher current source may be used; the inverter will limit its input current to the values stated

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| | SE3000H-US | SE3800H-US | SE6000H-US | SE7600H-US | SE10000H-US SE11400H-US | UNITS | | |
|---|--|--|------------|------------|-------------------------------------|---------|--|--|
| INPUT - DC (BATTERY) | | | | | | | | |
| Supported Battery Types | SolarEdge Energy Bank, LG RESU Prime ⁽⁶⁾ | | | | | | | |
| Number of Batteries per Inverter | Up to 3 SolarEdge Energy Bank, up to 2 LG RESU Prime | | | | | | | |
| Continuous Power ⁽⁷⁾ | 6000 | 7600 | 10000 | | | W | | |
| Peak Power ⁽⁷⁾ | 6000 | 7600 | | 100 | 000 | W | | |
| Max Input Current | 16 | 20 | | 26 | 5.5 | Adc | | |
| 2-pole Disconnection | Yes | | | | | | | |
| SMART ENERGY CAPABILITIES | | | | | | 1 | | |
| Consumption Metering | Built - in ⁽⁸⁾ | | | | | | | |
| Backup & Battery Storage | With Backup Interface (purchased separately) for service up to 200A; Up to 3 inverters | | | | | | | |
| EV Charging | Direct connection to Smart EV charger | | | | | | | |
| ADDITIONAL FEATURES | · | | | | | | | |
| Supported Communication Interfaces | RS485, Ethernet, Cellular ⁽⁹⁾ , Wi-Fi (optional), SolarEdge Energy Net (optional) | | | | | | | |
| Revenue Grade Metering, ANSI C12.20 | Built - in [®] | | | | | | | |
| Integrated AC, DC and Communication Connection Unit | Yes | | | | | | | |
| Inverter Commissioning | With the SetApp mobile application using built-in Wi-Fi Access Point for local connection | | | | | | | |
| DC Voltage Rapid Shutdown (PV and Battery) | Yes, according to NEC 2014, NEC 2017 and NEC 2020 690.12 | | | | | | | |
| STANDARD COMPLIANCE | | | | | | | | |
| Safety | UL1741, UL1741 SA, UL1741 PCS, UL1699B, UL1998, UL9540, CSA 22.2 | | | | | | | |
| Grid Connection Standards | IEEE1547, Rule 21, Rule 14H | | | | | | | |
| Emissions | FCC part 15 class B | | | | | | | |
| INSTALLATION SPECIFICATIONS | | | | | | | | |
| AC Output and EV AC Output Conduit Size / AWG Range | 1" maximum / 14-4 AWG | | | | | | | |
| DC Input (PV and Battery) Conduit Size / AWG Range | 1" maximum / 14-6 AWG | | | | | | | |
| Dimensions with Connection Unit (H x W x D) | 17.7 x 1 | 17.7 x 14.6 x 6.8 / 450 x 370 x 174 | | | 17.7 x 14.6 x 6.8 / 450 x 370 x 174 | in / mm | | |
| Weight with Connection Unit | | 26 / 11.8 | | | 30.2 / 13.7 | lb/kg | | |
| Noise | < 25 | < 25 < 50* | < 25 | | < 50 | dBA | | |
| Cooling | Natural Convection | | | | | | | |
| Operating Temperature Range | | -40 to +140 / -40 to +60 ⁽¹⁰⁾ | | | | | | |
| Protection Rating | NEMA 4 | | | | | | | |

⁽⁶⁾ The part numbers SExxxxXH-USxMxxxxx only support the SolarEdge Energy Bank. The part numbers SExxxxH-USxNxxxxx support both SolarEdge Energy Bank and LG RESU Prime batteries Requires supporting inverter firmware

⁽⁷⁾ Discharge power is limited up to the inverter rated AC power for on-grid and backup applications

⁽⁸⁾ For consumption metering current transformers should be ordered separately. SECT-SPL-225A-T-20 or SEACT0750-400NA-20 units per box. Revenue grade metering is only for production metering

⁽⁹⁾ Information concerning the Data Plan's terms & conditions is available in the following link: https://www.solaredge.com/sites/default/files/se-communication-plan-terms-and-conditions-eng.pdf

⁽¹⁰⁾ 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-na.pdf