

SolarEdge Home Hub Inverter

USA Domestic Content Eligible*

Single Phase, for North America

SE3800H-US / SE5700H-US / SE7600H-US / SE10000H-US /
SE11400H-US



HOME BACKUP



SolarEdge's USA-manufactured residential single phase inverter offering for storage and backup applications

- Eligible for domestic content: SolarEdge USA-manufactured inverters*, when paired with certain SolarEdge Power Optimizers, are intended to be eligible for the enhanced federal income tax credit for domestic content
- The ultimate home energy manager in charge of PV production, battery storage, backup operation during a power outage**, EV Charging, and smart energy devices
- Record-breaking 99% weighted efficiency with up to 200% DC oversizing
- Able to start high LRA HVAC systems during backup operation
- Integrates seamlessly with the complete SolarEdge Home Smart Energy Ecosystem, through SolarEdge Home Network
- Module-level monitoring and visibility of battery status, PV production, and self-consumption data
- Fast and easy installation – small and lightweight, with reduced commissioning time
- A scalable solution that supports future homeowner needs through easy connection to a growing ecosystem of products
- Advanced safety features with integrated arc fault protection and rapid shutdown for 690.11 and 690.12
- Advanced reliability with automotive-grade components
- Embedded revenue grade production data, ANSI C12.20 Class 0.5
- NEMA 4X-rated, for indoor and outdoor installations
- Embedded Power Control System (PCS) – install larger systems while avoiding main panel upgrade

* Manufactured by SolarEdge with the intent to be eligible for inclusion under the elective safe harbor in calculating the Domestic Cost Percentage under the "Rooftop (MLPE)" category (under IRS Notice 2024-41). The PCBA and Enclosure are domestically manufactured to meet the requirements of eligibility to be considered for the ITC domestic content bonus adder. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% domestic content bonus, to determine how the applicable rules apply to your particular project. The forward-looking statements in this datasheet are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

** Requires additional hardware and firmware version upgrade.

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Model Number ⁽¹⁾	SE3800H-US	SE5700H-US	SE7600H-US	SE10000H-US	SE11400H-US	
OUTPUT – AC ON GRID						
Maximum AC Power Output	3800 @ 240V 3300 @ 208V	5760 @ 240V 5000 @ 208V	7600 @ 240V	10,000 @ 240V	11,400 @ 240V 10,000 @ 208V	W
AC Output Voltage (Nominal)	208 / 240					Vac
AC Output Voltage (Range)	183 – 264					Vac
AC Frequency Range (min - nom - max)	59.3 – 60 – 60.5 ⁽²⁾					Hz
Maximum Continuous Output Current	16 @ 240V 16 @ 208V	24 @ 240V 24 @ 208V	32 @ 240V	42 @ 240V	47.5 @ 240V 48 @ 208V	A
GFDI Threshold	1					A
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					W
OUTPUT – AC STANDALONE (BACKUP)⁽³⁾						
Rated AC Power in Standalone Operation ⁽⁴⁾	11,400					W
Maximum Continuous Output Current in Standalone Operation	48					A
Locked Rotor Amperage (LRA) ⁽⁵⁾	Up to 106					A
AC L-L Output Voltage Range in Standalone Operation	211 – 264					Vac
AC L-N Output Voltage Range in Standalone Operation	105 – 132					Vac
AC Frequency Range in Standalone Operation (min - nom - max)	55 – 60 – 65					Hz
GFDI	1					A
THD	< 5					%
INPUT – DC (PV AND BATTERY)						
Transformer-less, Ungrounded	Yes					
Maximum Input Voltage	480					Vdc
Nominal DC Input Voltage	380					Vdc
Reverse-Polarity Protection	Yes					
Ground-Fault Isolation Detection	600kΩ Sensitivity					
Maximum Input Short Circuit Current	45					Adc
Maximum Inverter Efficiency	99.2					%
CEC Weighted Efficiency	98.5		99		99 @ 240V 98.5 @ 208V	%
2-Pole Disconnection	Yes					
DC CONNECTION – PV						
Maximum Input Power	7600 @ 240V 6600 @ 208V	11,520 @ 240V 10,000 @ 208V	15,200 @ 240V	20,000 @ 240V	22,800 @ 240V 20,000 @ 208V	W
Maximum Input Current	20 @ 240V 17 @ 208V	30 @ 240V 26 @ 208V	40 @ 240V	53 @ 240V	60 @ 240V 53 @ 208V	Adc
Number of Ports	3					
Maximum Current per Port	40					Adc

(1) These specifications apply to inverters with part number SExxxxH-USMNUxxx5 and connection unit model number DCD-1PH-US-PxH-F-x

(2) For other regional settings please refer to the [SolarEdge Inverters, Power Control Options](#) application note.

(3) Not designed for non-grid connected applications and requires AC for commissioning. Standalone (backup) functionality is only supported for the 240V grid.

(4) For models SE7600H-US and below, the Rated AC Power in Standalone Operation is configurable between 7,600W with a Maximum Continuous Output Current of 32A or 11,400W with a Maximum Continuous Output Current of 48A, from firmware version 4.20.xx.

(5) For more information about LRA (Locked Rotor Amperage) values, see the [SolarEdge Home Hub Inverter LRA](#) application note.

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Model Number ⁽¹⁾	SE3800H-US	SE5700H-US	SE7600H-US	SE10000H-US	SE11400H-US	
DC CONNECTION – BATTERY						
Supported Battery Types	SolarEdge Home Battery 400V					
Number of Batteries per Inverter	Up to 3					
Maximum Continuous Power (Charge and Discharge) ⁽⁶⁾	11,400				W	
Number of Ports	2					
Maximum Current per Port	40				Adc	
2-pole Disconnection	Up to the inverter's rated standalone power					
SMART ENERGY CAPABILITIES						
Consumption Metering	Built-in ⁽⁷⁾					
Standalone & Battery Storage	With Backup Interface (purchased separately) for service up to 200A; up to 3 inverters					
EV Charging	Direct connection to the SolarEdge Home EV Charger ⁽⁸⁾					
ADDITIONAL FEATURES						
Supported Communication Interfaces	RS485, Ethernet, Cellular ⁽⁹⁾ , Wi-Fi ⁽¹⁰⁾ (optional), SolarEdge Home Network ⁽¹⁰⁾ (optional)					
Revenue Grade Metering, ANSI C12.20	Built-in ⁽⁷⁾					
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, NEC 690.12					
STANDARD COMPLIANCE						
Safety	UL 1741, UL 1741SA, UL 1741SB, UL 1699B, CSA 22.2#107.1, C22.2#330, C22.3#9, ANSI/CAN/UL 9540					
Grid Connection Standards	IEEE1547-2018 and IEEE-1547.1 Rule 21, Rule 14H					
Emissions	FCC Part 15 Class B					
Power Control System (PCS)	UL 1741 PCS ⁽¹¹⁾					
INSTALLATION SPECIFICATIONS						
AC Terminals	L1, L2, N terminal blocks, PE busbar for inverter connection L1, L2 terminal blocks, PE busbar for EV Charger AC connection					
DC Terminals	3 x terminal block pairs for PV input, 2 x terminal block pair for battery input					
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)	21.06 x 14.6 x 8.2 / 535 x 370 x 208				in / mm	
Weight with Connection Unit	44.9 / 20.3				lb / kg	
Noise	< 50					dBA
Cooling	Natural Convection					
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽¹²⁾					°F / °C
Protection Rating	NEMA 4X					

(6) Discharge power is limited up to the inverter's rated AC power for on-grid and standalone applications, as well as up to the installed batteries' rating.

(7) For consumption metering current transformers should be ordered separately: SECT-SPL-225A-T-20 or SEACT1250-400NA-20. Revenue grade metering is only for production metering.

(8) For more information about the SolarEdge Home EV Charger, refer to the [SolarEdge Home EV Charger](#) datasheet.

(9) Information concerning the data plan terms & conditions is available in [SolarEdge Communication Plan Terms and Conditions](#).

(10) SolarEdge Home Network Plugin ENET-HBNP-01 and Wi-Fi Antenna SE-ANT-ZBWIFI-KIT purchased separately. For more information, refer to the [SolarEdge Home Network Plugin](#) datasheet and the [Antenna for Wi-Fi and ZigBee Wireless Communications](#) datasheet.

(11) Only part numbers SExxxxH-USMnxxx7x support the PCS meter.

(12) Full power up to at least 122°F / 50°C; for power derating information refer to the [Temperature Derating for North America](#) technical note.

SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

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