

SolarEdge Home Hub Inverter

For North America

SE3800H-US / SE5700H-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
- Multi-inverter, scalable storage solution, with enhanced battery power up to 10kW
- Supports LRA – can provide the required energy for HVAC systems starting during backup operation
- Integrated arc fault protection and rapid shutdown for NEC 2014 – 2023, per article 690.11 and 690.12
- Small, lightweight, and easy to install
- Embedded revenue grade production data, ANSI C12.20 Class 0.5
- 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 Home EV Charger

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Applicable to inverters with part number	SEXXXXH-USMNBXXXX / SEXXXXH-USSNBXXXX						Units	
	SE3800H-US	SE5700H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US		
OUTPUT – AC ON GRID								
Rated AC Power	3800 @ 240V 3300 @ 208V	5760 @ 240V 5000 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	11,400 @ 240V 10,000 @ 208V	W	
Maximum AC Power Output	3800 @ 240V 3300 @ 208V	5760 @ 240V 5000 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	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 @ 240V	16	24	25	32	42	47.5	A	
Maximum Continuous Output Current @ 208V	16	24	24	-	-	48	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 BACKUP⁽³⁾⁽⁴⁾								
Rated AC Power in Backup Operation	7600	5760	6000	7600 11,400*	10000 11,400*	11,400	W	
AC L-L Output Voltage Range in Backup	211 – 264						Vac	
AC L-N Output Voltage Range in Backup	105 – 132						Vac	
AC Frequency Range in Backup (min - nom - max)	55 – 60 – 65						Hz	
Maximum Continuous Output Current in Backup Operation	32	24	25	32 47.5	42 47.5	47.5	A	
GFDI	1						A	
THD	< 5						%	
OUTPUT – SOLAREEDGE HOME EV CHARGER AC								
Rated AC Power	9600						W	
AC Output Voltage Range	211 – 264						Vac	
On-Grid AC Frequency Range (min - nom - max)	59.3 – 60 – 60.5						Hz	
Maximum Continuous Output Current @240V (grid, PV and battery)	40						Aac	
INPUT – DC (PV AND BATTERY)								
Transformer-less, Ungrounded	Yes							
Max Input Voltage	480						Vdc	
Nom DC Input Voltage	380						Vdc	
Reverse-Polarity Protection	Yes							
Ground-Fault Isolation Detection	600kΩ Sensitivity							
INPUT – DC (PV)								
Maximum DC Power @ 240V	7600	11,520	12,000	15,200	20,000	22,800	W	
Maximum DC Power @ 208V	6600	10,000	10,000	-	-	20,000	W	
Maximum Input Current ⁽⁵⁾ @ 240V	20	16	16.5	20 30	30	30	Adc	
Maximum Input Current ⁽⁵⁾ @ 208V	9	13.5	13.5	-	-	27	Adc	
Max. Input Short Circuit Current	45							
Maximum Inverter Efficiency	99.2						%	
CEC Weighted Efficiency	99						99 @ 240V 98.5 @ 208V	%
2-pole Disconnection	Yes							

* Supported with PN SExxxxH-USMNBxxxx.

(1) These specifications apply to inverters with part numbers SExxxxH-USMNBxxxx or SExxxxH-USSNBxxxx 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) For LRA (Locked Rotor Amperage) values please refer to the [LRA for NAM](#) application note.

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

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	SE3800H-US	SE5700H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	
OUTPUT – DC (BATTERY)							
Supported Battery Types	SolarEdge Home Battery, LG RESU Prime						
Number of Batteries per Inverter	Up to 3 SolarEdge Home Battery, up to 2 LG RESU Prime						
Continuous Power ⁽⁶⁾	7600 @ 240V 3800 @ 208V	5760 @ 240V 5000 @ 208V	6000	11400	11,400 @ 240V 10,000 @ 208V	W	
Peak Power ⁽⁶⁾	7600 @ 240V 3800 @ 208V	5760 @ 240V 5000 @ 208V	6000	11400	11,400 @ 240V 10,000 @ 208V	W	
Max Input Current	20	26.5				Adc	
2-pole Disconnection	Up to inverter rated backup power						
SMART ENERGY CAPABILITIES							
Consumption Metering	Built-in ⁽⁷⁾						
Backup & Battery Storage	With Backup Interface (purchased separately) for service up to 200A; up to 3 inverters						
EV Charging	Direct connection to SolarEdge Home EV Charger						
ADDITIONAL FEATURES							
Supported Communication Interfaces	RS485, Ethernet, Cellular ^(8, 9) , Wi-Fi ⁽⁹⁾ , SolarEdge Home Network						
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, according to NEC 2014 – 2023 per article 690.11 and article 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	IEEE 1547 and IEEE 1547.1, 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 14.6 x 6.8 / 450 x 370 x 174		17.7 x 14.6 x 6.8 / 450 x 370 x 174**	21.06 x 14.6 x 7.3 / 535 x 370 x 185**	21.06 x 14.6 x 8.2 / 535 x 370 x 208***	in / mm	
Weight with Connection Unit	30.8 / 14		30.8 / 14**	41.7 / 18.9**	44.9 / 20.3***	lb / kg	
Noise	< 50						dBA
Cooling	Natural Convection						
Operating Temperature Range	(-) 40 to (+) 140 / (-) 40 to (+) 60 ⁽¹⁰⁾						°F / °C
Protection Rating	NEMA 4X						

** Supported with PN SEXXXXH-USSNBXXX4 or SEXXXXH-USMNBXXX4.

*** Supported with PN SEXXXXH-USSNBXXX5 or SEXXXXH-USMNBXXX5.

(6) Discharge power is limited up to the inverter rated AC power for on-grid and backup 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 SEACT0750-400NA-20 units per box. Revenue grade metering is only for production metering.

(8) Information concerning the Data Plan's terms & conditions is available in the [SolarEdge Communication Plan Terms and Conditions](#).

(9) The part number SEXXXXH-USXNBXXX only supports the Wi-Fi communication interface, and the part number SEXXXXH-USXNBLLXX only supports the cellular communication interface.

(10) Full power up to at least 50°C / 122°F. 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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