SolarEdge Home Hub Inverter For North America

SE3800H-US / SE5700H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US⁽¹⁾



HOME BACKU

Optimized battery storage with HD-Wave technology

- Record-breaking 99% weighted efficiency with 200% DC oversizing
- Supports LRA can provide the required energy for HVAC systems starting during backup operation
- 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 Home **EV** Charger

- Multi-inverter, scalable storage solution, with enhanced battery power up to 10kW
- Integrated arc fault protection and rapid shutdown for NEC 2014 – 2023, per article 690.11 and 690.12
- Embedded revenue grade production data, ANSI C12.20 Class 0.5



/ SolarEdge Home Hub Inverter

For North America

SE3800H-US / SE5700H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US⁽¹⁾

Applicable to inverters with part number	SEXXXXH-USMNBBXXX / SEXXXXH-USSNBBXXX								
	SE3800H-US	SE5700H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	Units		
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 @ 208	W		
AC Output Voltage (Nominal)	208 / 240								
AC Output Voltage (Range)	183 – 264								
AC Frequency Range (min - nom - max)	59.3 - 60 - 60.5 ⁽²⁾								
Maximum Continuous Output Current @ 240V	16	24	25	32	42	47.5	А		
Maximum Continuous Output Current @ 208V GFDI Threshold	16	24	24	- 1	-	48	A 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								
OUTPUT – AC BACKUP ⁽³⁾⁽⁴⁾							W		
TO THE BRIENCE				7600	10000				
Rated AC Power in Backup Operation	7600	5760	6000	11,400*		11,400	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						Hz		
Maximum Continuous Output Current in Backup Operation	32	24	25	32 47.5	42 47.5	47.5	А		
GFDI	1								
THD	<5								
OUTPUT – SOLAREDGE HOME EV CHA	RGER AC								
Rated AC Power			96	500			W		
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	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 9 9 240V 98.5 @ 208V						%		
2-pole Disconnection	Yes								

^{*} Supported with PN SExxxxH-USMNxxxxxx.



⁽¹⁾ These specifications apply to inverters with part numbers SExxxxH-USMNxxxxx or SExxxxH-USSNxxxxxx 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 <u>LRA for NAM</u> 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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For North America

SE3800H-US / SE5700H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US⁽¹⁾

Applicable to inverters with part number	SEXXXXH-USMNBBXXX / SEXXXXH-USSNBBXXX								
	SE3800H-US	SE5700H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	Units		
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			11,400 @ 240V 10,000 @ 208V	W		
Peak Power ⁽⁶⁾	7600 @ 240V 3800 @ 208V	5760 @ 240V 5000 @ 208V	6000	114	11400 11, 10,		W		
Max Input Current	20			26.5					
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 a	nd 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 37	0 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		
				21.06 x 14.6 x 8.2 / 535 x 370 x 208***					
Weight with Connection Unit		30.8 / 14		30.8 / 14** 44.9 /	41.7 / 18.9** 20.3***	44.9 / 20.3***	lb/kg		
Noise	< 50								
Cooling	Natural Convection								
Operating Temperature Range	(-) 40 to (+) 140 / (-) 40 to (+)60 ⁽¹⁰⁾								
Protection Rating	NEMA 4X								

^{**} Supported with PN SEXXXXH-USSNBBXX4 or SEXXXXH-USMNBBXX4.

^{***} Supported with PN SEXXXXH-USSNBBXX5 or SEXXXXH-USMNBBXX5.

⁽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 <u>SolarEdge Communication Plan Terms and Conditions</u>.

(9) The part number SEXXXXH-USXNBB**X**XX only supports the Wi-Fi communication interface, and the part number SEXXXXH-USXNBBLXX 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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