

SolarEdge Home Hub Inverter

For North America

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 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, 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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	SE3800H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	Units
OUTPUT – AC ON GRID						
Rated AC Power	3800 @ 240V 3300 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208	W
Maximum AC Power Output	3800 @ 240V 3300 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208	W
AC Frequency Range (min - nom - max)	59.3 – 60 – 60.5 ⁽²⁾					Hz
Maximum Continuous Output Current @ 240V	16	25	32	42	47.5	A
Maximum Continuous Output Current @ 208V	16	24	-	-	48.5	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⁾						
Rated AC Power in Backup Operation ⁽⁴⁾	3800	6000	7600	10300	10300	W
	7600*		10300*			
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	16	25	32	43	43	A
	32*		43*			
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	12000	15200	22000	22800	W
	15200*		22800*			
Maximum DC Power @ 208V	6600	10000	-	-	20000	W
Maximum Input Current ⁽⁵⁾ @ 240V	10.5	16.5	20	27	31	Adc
	20*		31*			
Maximum Input Current ⁽⁵⁾ @ 208V	9	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-USMMxxxxxx or SExxxxH-USMNxxxxxx.

(1) These specifications apply to inverters with part numbers SExxxxH-USMxxxxxx or SExxxxH-USNxxxxxx 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 is 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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OUTPUT – DC (BATTERY)						
Supported Battery Types	SolarEdge Home Battery, LG RESU Prime ⁽⁶⁾					
Number of Batteries per Inverter	Up to 3 SolarEdge Home Battery, up to 2 LG RESU Prime					
Continuous Power ⁽⁷⁾	7600	10000				W
Peak Power ⁽⁷⁾	7600	10000				W
Max Input Current	20	26.5				Adc
2-pole Disconnection	Yes					
SMART ENERGY CAPABILITIES						
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 SolarEdge Home EV Charger					
ADDITIONAL FEATURES						
Supported Communication Interfaces	RS485, Ethernet, Cellular ⁽⁹⁾ , Wi-Fi (optional), SolarEdge Home Network (optional)					
Revenue Grade Metering, ANSI C12.20	Built-in ⁽⁸⁾					
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 SB, UL1741 PCS, UL1699B, UL1998, UL9540, CSA 22.2					
Grid Connection Standards	IEEE1547-2018, 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	17.7 x 14.6 x 6.8 / 450 x 370 x 174		in / mm	
		17.7 x 14.6 x 6.8 / 450 x 370 x 174*				
Weight with Connection Unit	26 / 11.8	26 / 11.8	41.7 / 18.9		lb / kg	
		41.7 / 18.9*				
Noise	< 25	< 25	< 50		dBA	
	< 50*					
Cooling	Natural Convection					
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽¹⁰⁾					°F / °C
Protection Rating	NEMA 4					

(6) The part numbers SExxxxH-USxMxxxx only support the SolarEdge Home Battery. The part numbers SExxxxH-USxNxxxx support both SolarEdge Home Battery 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>.

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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