SolarEdge Home Hub Inverter Re-Energize Program USA Domestic Content Eligible* Single Phase, for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US





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

- Eligible for domestic content: SolarEdge USAmanufactured 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). For inverters with part number SExxxxxH-USMNxBLx5, 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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SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US

Applicable to inverters with part number	SExxxxxH-USMNFBL75				
Model Number ⁽¹⁾	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	Units
OUTPUT – AC ON GRID					
Maximum AC Power Output	3000 @ 240V	3800 @ 240V 3300 @ 208V	5000 @ 240V	6000 @ 240V 5000 @ 208V	W
AC Output Voltage (Nominal)		208/	240		Vac
AC Output Voltage (Range)		183 – 2	264		Vac
AC Frequency Range (min - nom - max)		59.3 - 60 -	- 60.5 ⁽²⁾		Hz
Maximum Continuous Output Current	12.5 @ 240V	16 @ 240V 16 @ 208V	21 @ 240V	25 @ 240V 24 @ 208V	А
GFDI Threshold		1			А
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			А	
Locked Rotor Amperage (LRA) ⁽⁵⁾	Up to 106			А	
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		55 – 60 – 65			Hz
GFDI		1			А
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			98.5	
2-Pole Disconnection	98.5 @ 208V			%	
DC CONNECTION – PV					
Maximum Input Power	6000 @ 240V	7600 @ 240V 6600 @ 208V	10000 @ 240V	12000 @ 240V 10000 @ 208V	W
Maximum Input Current	16 @ 240V	20 @ 240V 17 @ 208V	26.5 @ 240V	32 @ 240V 26.5 @ 208V	Adc
Number of Ports	3				
Maximum Current per Port	40			Adc	

⁽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 <u>SolarEdge Home Hub Inverter LRA</u> application note.

/ SolarEdge Home Hub Inverter Re-Energize Program **USA Domestic Content Eligible*** Single Phase, for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US

Applicable to inverters with part number	to inverters with part number SExxxxxH-USMNFBL75				
Model Number ⁽¹⁾	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	Units
DC CONNECTION – BATTERY			1		
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 rate	d 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-ii	n ⁽⁷⁾		
Integrated AC, DC, and Communication Connection Unit		Yes			
Inverter Commissioning	With the SetApp m	obile application using built	t-in Wi-Fi Access Point fo	r local connection	
DC Voltage Rapid Shutdown (PV and Battery)		Yes, NEC	690.12		
STANDARD COMPLIANCE					
Safety	UL 1741, UL 1741SA, UL 1	741SB, 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				
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 ⁽¹¹⁾			°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 enter Network Plugin datasheet and the Antenna for Wi-Fi and ZigBee Wireless Communications datasheet.
- (11) 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 Home Hub Inverter Re-Energize Program USA Domestic Content Eligible* Single Phase, for North America SE7600H-US / SE10000H-US / SE11400H-US

SExxxxxH-USMNFBL75 Applicable to inverters with part number Model Number⁽¹⁾ SE10000H-US SE11400H-US SE7600H-US Units **OUTPUT - AC ON GRID** 11,400 @ 240V Maximum AC Power Output 7600 @ 240V 10.000 @ 240V W 10.000 @ 208V 208 / 240 AC Output Voltage (Nominal) AC Output Voltage (Range) Vac $59.3 - 60 - 60.5^{(2)}$ AC Frequency Range (min - nom - max) Hz 47.5 @ 240V 42 @ 240V Maximum Continuous Output Current 32 @ 240V 48 @208V GFDI Threshold Α Total Harmonic Distortion (THD) < 3 % 1, adjustable -0.85 to 0.85 Utility Monitoring, Islanding Protection, Country Configurable Thresholds 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 48 Α Operation Locked Rotor Amperage (LRA)⁽⁵⁾ Up to 106 AC L-L Output Voltage Range in Standalone Operation AC L-N Output Voltage Range in Standalone Operation AC Frequency Range in Standalone Operation 55 - 60 - 65Hz **GFDI** Α THD < 5 % INPUT - DC (PV AND BATTERY) Transformer-less, Ungrounded Yes Vdc Maximum Input Voltage 480 Vdc Nominal DC Input Voltage 380 Reverse-Polarity Protection Yes Ground-Fault Isolation Detection 600kΩ Sensitivity Adc Maximum Input Short Circuit Current 45 % Maximum Inverter Efficiency 992 98.5 CEC Weighted Efficiency 99 @ 240V 98.5 @ 208V % 2-Pole Disconnection DC CONNECTION - PV 22,800 @ 240V Maximum Input Power 15,200 @ 240V 20,000 @ 240V W 20 000 @ 208V 60 @ 240V Maximum Input Current 40 @ 240V 53 @ 240V Ado 53 @ 208V Number of Ports Maximum Current per Port

⁽¹⁾ These specifications apply to inverters with part number SExxxxH-USMNFBL75 and connection unit model number DCD-1PH-US-PxH-F-x.

⁽²⁾ For other regional settings please refer to the <u>SolarEdge Inverters</u>, <u>Power Control Options</u> 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 <u>SolarEdge Home Hub Inverter LRA</u> application note

/ SolarEdge Home Hub Inverter Re-Energize Program **USA Domestic Content Eligible*** Single Phase, for North America

SE7600H-US / SE10000H-US / SE11400H-US

Applicable to inverters with part number	r SExxxxxH-USMNFBL75				
Model Number ⁽¹⁾	SE7600H-US	SE10000H-US	SE11400H-US	Units	
DC CONNECTION – BATTERY					
Supported Battery Types	5	SolarEdge Home Battery 400V			
Number of Batteries per Inverter		Up to 3			
Maximum Continuous Power (Charge and Discharge) ⁽⁶⁾		11,400			
Number of Ports		2			
Maximum Current per Port		40		Adc	
2-pole Disconnection	Up to the	ne inverter's rated standalone powe	r		
SMART ENERGY CAPABILITIES					
Consumption Metering	Built-in ⁽⁷⁾				
Standalone & Battery Storage	With Backup Interface (purch	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 applic	cation using built-in Wi-Fi Access Po	int for local connection		
DC Voltage Rapid Shutdown (PV and Battery)		Yes, NEC 690.12			
STANDARD COMPLIANCE					
Safety	UL 1741, UL 1741SA, UL 1741SB, UL 1	699B, CSA 22.2#107.1, C22,2#330, (22.3#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				
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 ⁽¹¹⁾				
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 <u>SolarEdge Home EV Charger</u> 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⁾ 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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