

Single Phase Energy Hub Inverter with Prism Technology

for North America

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



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 smart EV charger
- / Multi-inverter, scalable StorEdge® solution
- / Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- / Embedded revenue grade production data, ANSI C12.20 Class 0.5

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	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	UNITS
OUTPUT - AC ON GRID						
Rated AC Power	3000	3800	5000	6000	7600	W
Maximum AC Power Output	3000	3800	5000	6000	7600	W
AC Output Voltage Range	211-264					Vac
AC Frequency Range (min - nom - max)	59.3 - 60 - 60.5 ⁽²⁾					Hz
Maximum Continuous Output Current	12.5	16	21	25	32	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	2400	3050	4000	4800	6100	W
Peak AC Power (<10 sec) in Backup Operation	2700	3400	4500	5400	6900	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	10	12.7	16.6	20	25.5	A
Peak AC Current (<10sec) in Backup Operation	11.25	14.2	18.75	22.5	30	A
GFDI	1					A
THD	<5					%
OUTPUT - SMART EV CHARGER AC						
Rated AC Power	9,600					W
AC Output Voltage Range	211-264					Vac
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				400	Vdc
Reverse-Polarity Protection	Yes					
Ground-Fault Isolation Detection	600k Ω Sensitivity					
INPUT - DC (PV)						
Maximum DC Power	6000	7600	10000	12000	15600	W
Maximum Input Current ⁽⁴⁾	8.5	10.5	13.5	16.5	20	Adc
Max. Input Short Circuit Current	45					Adc
Maximum Inverter Efficiency	99.2					%
CEC Weighted Efficiency	99					%
2-pole Disconnection	Yes					
INPUT - DC (BATTERY)						
Supported Battery Types	LG Chem RESU10H					
Number of Batteries per Inverter	1 or 2 ⁽⁵⁾					
Maximum Battery Capacity per Inverter	19.6					kWh
Continuous Power Per Inverter	5000					W
Peak Power	6900					W
Max Input Current @240V	18					Adc
2-pole Disconnection	Yes					

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SMART ENERGY CAPABILITIES				
Consumption Metering	Built-in ⁽⁶⁾			
Battery Storage	With Backup Interface for service up to 200A; Up to 3 inverters, 15kW backup power, and 60kWh backup capacity			
EV Charging	Direct connection to Smart EV charger			
ADDITIONAL FEATURES				
Supported Communication Interfaces	RS485, Ethernet, Wi-Fi (optional), Cellular			
Revenue Grade Metering, ANSI C12.20	Built - in ⁽⁶⁾			
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 and 2017 690.12			
STANDARD COMPLIANCE				
Safety	UL1741, UL1741 SA, UL1699B, UL1998, UL9540, CSA 22.2			
Grid Connection Standards	IEEE1547, Rule 21, Rule 14H			
Emissions	FCC part15 class B			
INSTALLATION SPECIFICATIONS				
AC Output Conduit Size / AWG Range	3/4" maximum / 14-8 AWG	1" maximum / 14-6 AWG		
EV AC Output Conduit Size / AWG Range	3/4" maximum / 14-8 AWG	1" maximum / 14-6 AWG		
DC Input (PV) Conduit Size / AWG Range	3/4" maximum / 14-8 AWG	1" maximum / 14-6 AWG		
DC Input (Battery) Conduit Size / AWG Range	3/4" maximum / 14-8 AWG	1" maximum / 14-6 AWG		
Dimensions with Connection Unit (HxWxD)	17.7 X 14.6 X 6.8 / 450 X 370 X 174			in / mm
Weight with Connection Unit	26 / 11.8	29.1 / 3.2	30.2 / 13.7	lb / kg
Noise	< 25			dBA
Cooling	Natural Convection			
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁷⁾			°F / °C
Protection Rating	NEMA 4X			

(1) These specifications apply to inverters with part numbers SExxxxH-US3xxxx or SE7600H-US3SHxxxx 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

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

(5) When connecting two LG Chem RESU batteries, each battery must have a different part number

(6) For consumption metering current transformers should be ordered separately: SEACT0750-200NA-20 or SEACT0750-400NA-20. 20 units per box.

(7) 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>

Connecting CTs to the Revenue Grade and Consumption Meter

