

# Single Phase Energy Hub Inverter with Prism Technology

for North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US<sup>(1)</sup>



## 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 storage solution
- 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

# / Single Phase Energy Hub Inverter with Prism Technology

for North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US<sup>(1)</sup>

	SE3000H-US	SE3800H-US	SE6000H-US	SE7600H-US	UNITS
<b>OUTPUT - AC ON GRID</b>					
Rated AC Power	3000	3800	6000	7600	W
Maximum AC Power Output	3000	3800	6000	7600	W
AC Output Voltage Range	211-264				Vac
AC Frequency Range (min - nom - max)	59.3 - 60 - 60.5 <sup>(2)</sup>				Hz
Maximum Continuous Output Current	12.5	16	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
<b>OUTPUT - AC BACKUP<sup>(3)</sup></b>					
Rated AC Power in Backup Operation <sup>(4)</sup>	3000	3800 7600*	6000	7600	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	12.5	16 32*	25	32	A
GFDI	1				A
THD	<5				%
<b>OUTPUT - SMART EV CHARGER AC</b>					
Rated AC Power	9600				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
<b>INPUT - DC (PV AND BATTERY)</b>					
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				
<b>INPUT - DC (PV)</b>					
Maximum DC Power	6000	7600 15200*	12000	15200	W
Maximum Input Current <sup>(5)</sup>	8.5	10.5 20*	16.5	20	Adc
Max. Input Short Circuit Current	45				Adc
Maximum Inverter Efficiency	99.2				%
CEC Weighted Efficiency	99				%
2-pole Disconnection	Yes				
<b>INPUT - DC (BATTERY)</b>					
Supported Battery Types	LG Chem RESU 10H & RESU16H Prime <sup>(6)</sup>				
Number of Batteries per Inverter	1 or 2 <sup>(7)</sup>				
Maximum Battery Capacity per Inverter	19.6				kWh
Continuous Power Per Inverter <sup>(8)</sup>	5000				W
Peak Power <sup>(8)</sup>	7000				W
Max Input Current @240V	18				Adc
2-pole Disconnection	Yes				

# / Single Phase Energy Hub Inverter with Prism Technology

## for North America

### SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US<sup>(1)</sup>

	SE3000H-US	SE3800H-US	SE6000H-US	SE7600H-US	UNITS
<b>SMART ENERGY CAPABILITIES</b>					
Consumption Metering	Built - in <sup>(9)</sup>				
Backup & Battery Storage	With Backup Interface (purchased separately) for service up to 200A; Up to 3 inverters, 15kW backup power, and 60kWh backup capacity				
EV Charging	Direct connection to Smart EV charger				
<b>ADDITIONAL FEATURES</b>					
Supported Communication Interfaces	RS485, Ethernet, Wi-Fi (optional), Cellular <sup>(10)</sup>				
Revenue Grade Metering, ANSI C12.20	Built - in <sup>(9)</sup>				
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				
<b>STANDARD COMPLIANCE</b>					
Safety	UL1741, UL1741 SA, UL1741 PCS, UL1699B, UL1998, UL9540, CSA 22.2				
Grid Connection Standards	IEEE1547, Rule 21, Rule 14H				
Emissions	FCC part 15 class B				
<b>INSTALLATION SPECIFICATIONS</b>					
AC Output Conduit Size / AWG Range	3/4" maximum / 14-8 AWG	3/4" maximum / 14-8 AWG 1" maximum / 14-4 AWG*	1" maximum / 14-4 AWG		
EV AC Output Conduit Size / AWG Range	3/4" maximum / 14-8 AWG	3/4" maximum / 14-8 AWG 1" maximum / 14-6AWG*	1" maximum / 14-4 AWG		
DC Input (PV) Conduit Size / AWG Range	3/4" maximum / 14-8 AWG	3/4" maximum / 14-8 AWG 1" maximum / 14-6 AWG*	1" maximum / 14-6 AWG		
DC Input (Battery) Conduit Size / AWG Range	3/4" maximum / 14-8 AWG	3/4" maximum / 14-8 AWG 1" maximum / 14-6 AWG*	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				in / mm
Weight with Connection Unit	26 / 11.8	26 / 11.8 30.2 / 13.7*	30.2 / 13.7		lb / kg
Noise	< 25	< 25 < 50*	< 50		dBA
Cooling	Natural Convection				
Operating Temperature Range	-40 to +140 / -40 to +60 <sup>(11)</sup>				°F / °C
Protection Rating	NEMA 4				

\* Supported with PN SE3800H-USMxxxxx

(1) These specifications apply to inverters with part numbers SExxxxH-USS3Bxxxx, SE3800H-USMxxBCxx or SE7600H-USSSHxxxx 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) Rated AC power in Backup Operation are 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

(6) Requires supporting inverter FW for RESU16H Prime battery

(7) When connecting two LG Chem RESU10H batteries, each battery must have a different part number. LG Chem RESU16H Prime is supported with a single battery only

(8) Discharge power is limited up to inverter rated AC power

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

Revenue grade metering is only for production metering

(10) For all cellular plans customer must verify that:

· Customer is responsible for verifying that the site location has adequate mobile coverage by the third party service provider prior to any installation by accessing <https://www.solaredge.com/products/communication/cellular-communication-options#/>

· SolarEdge shall not be responsible or liable for unavailability or discontinuance of network coverage in a specific area or region, any network downtime, or permanent service shutdown

(11) 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>

# / Single Phase Energy Hub Inverter with Prism Technology

for North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US<sup>(1)</sup>

## Connecting CTs to the Revenue Grade and Consumption Meter

