

EV Charging Single Phase Inverter

for North America

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



Optimized installation with HD-Wave technology and EV Charger

- Specifically designed to work with power optimizers
- Record-breaking efficiency
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Extremely small and easy to install outdoors or indoors
- EV charger cable and holder ordered separately for flexible cable length selection
- Integrated Level 2 EV charger with solar boost mode charging (grid & PV)
- Built-in module-level monitoring
- Optional: Revenue grade data, ANSI C12.20 Class 0.5 (0.5% accuracy)

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INVERTER SPECIFICATIONS:

	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE11400H-US	
OUTPUT						
Rated AC Power Output	3800	5000	6000	7600	11400	VA
Max. AC Power Output	3800	5000	6000	7600	11400	VA
AC Output Voltage Min.-Nom.-Max.	211 - 240 - 264					Vac
AC Frequency (Nominal)	59.3 - 60 - 60.5 ⁽¹⁾					Hz
Maximum Continuous Output Current	16	21	25	32	47.5	A
GFDI Threshold	1					A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes					
INPUT						
Maximum DC Power	5900	7750	9300	11800	17650	W
Transformer-less, Ungrounded	Yes					
Maximum Input Voltage	480					Vdc
Nominal DC Input Voltage	380			400		Vdc
Maximum Input Current	10.5	13.5	16.5	20	30.5	Adc
Max. Input Short Circuit Current	45					Adc
Reverse-Polarity Protection	Yes					
Ground-Fault Isolation Detection	600k Ω Sensitivity					
Maximum Inverter Efficiency	99.2					%
CEC Weighted Efficiency	99					%
Nighttime Power Consumption	< 2.5					W
ADDITIONAL FEATURES						
Supported Communication Interfaces	RS485, Ethernet, ZigBee (optional), Cellular (optional)					
Smart Energy Management	Export Limitation and Excess Solar Charging ⁽²⁾					
Revenue Grade Data, ANSI C12.20	Optional ⁽³⁾					
Inverter Commissioning	with the SetApp mobile application using built-in Wi-Fi access point for local connection					
Rapid Shutdown - NEC 2014 and 2017 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect					
STANDARD COMPLIANCE						
Safety	UL1741, UL1741 SA, UL1699B, CSA C22.2, Canadian AFCEI according to T.I.L. M-07					
Grid Connection Standards	IEEE1547, Rule 21, Rule 14 (HI)					
Emissions	FCC Part 15 Class B					
INSTALLATION SPECIFICATIONS						
AC Output Conduit Size / AWG Range	1" maximum / 14-6 AWG				1" maximum / 14-4 AWG	
DC Input Conduit Size / # of Strings / AWG Range	1" maximum / 1-2 strings / 14-6 AWG				1" maximum / 1-3 strings / 14-6 AWG	
Dimensions with Connection Unit with Safety Switch (HxWxD)	17.7 x 14.6 x 6.8 / 450 x 370 x 174				21.3 x 14.6 x 7.3 / 540 x 370 x 185	in / mm
Weight with Connection Unit with Safety Switch	22 / 10	25.1 / 11.4	26.2 / 11.9		38.8 / 17.6	lb / kg
Noise	< 25			<50		dBa
Cooling	Natural Convection					
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁴⁾					'F / 'C
Protection Rating	NEMA 4X (Inverter with Connection Unit with Safety Switch)					

(1) For other regional settings please contact SolarEdge support

(2) Import/Export meter is required for Export Limitation and for controlled Excess Solar charging

(3) Revenue grade meter P/N: SExxxxH-US000BNW4

(4) 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>

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EV CHARGER AND EV CHARGER CABLE SPECIFICATIONS:

OUTPUT — AC		
Charging Level	AC Level 2 Connection to the SolarEdge monitoring platform is required for first EV charging	
Rated AC Power Output (grid & PV)	9600	W
Nominal AC Output Voltage	240	Vac
Nominal AC Frequency	60	Hz
Maximum Continuous Output Current @240V (grid & PV)	40	Aac
Ground Fault Detection Threshold	5	mA
ADDITIONAL FEATURES		
EV Charger Status LEDs, Fault Indicator	Yes	
EV Charger Unplugging Detection	Yes, current termination according to SAE J1772	
EV Charger Ground Connection Monitoring	Yes, continuous	
EV Charger Configuration	Via the monitoring app; Ethernet / Cellular or ZigBee connection is required	
STANDARD COMPLIANCE		
Safety	UL2594, UL2231-1, UL2231-2, NEC Article 625 compliant	
EV Charger	SAE J1772-2009	
INSTALLATION SPECIFICATIONS		
EV Charger Connector	SAE J1772-2009	
EV Charger Cable Length ⁽⁵⁾	25 / 7.6	ft / m
EV Charger Cable Weight	12.5 / 5.7	lb / kg
EV Charger Cable Operating Temperature Range	-22 to +122 / -30 to +50	
Protection Rating (connected to EV or with dust cap)	NEMA 3R	

(5) EV charger cable ordered separately