SolarEdge Home EV Charger

For North America



SMART ENERGY

Smart EV Charging with SolarEdge

- Wi-Fi enabled, level 2 charging station, with up to 40A (9.6kW) charging power
- Control and monitoring via app including remote operations, smart scheduling and charging history
- Industry-leading 5-year warranty⁽¹⁾
- Rated for indoor or outdoor use
- Plug-in unit, easily modified to support hardwired installations⁽²⁾
- Suitable for use with or without a SolarEdge PV system

Optimized charging, when connected to a SolarEdge inverter⁽³⁾:

- Charges EV with up to 100% renewable energy by using excess-solar mode⁽⁴⁾
- Synchronizes with the full SolarEdge ecosystem (PV, home backup, and smart home devices), all managed by a single mobile app
- Faster charging with the unique Solar Boost mode, utilizing both grid and available PV simultaneously⁽³⁾

⁽⁴⁾ SolarEdge import/export meter and communication connectivity with the SolarEdge inverter are required for controlled excess solar charging.



⁽¹⁾ For additional information regarding the EV charging cable warranty terms please refer to: https://www.solaredge.com/warranty.

⁽²⁾ Hardwired installation by professional installer only

⁽³⁾ Supports AC connection to SolarEdge Home Hub and SolarEdge Home Wave inverters only. A dedicated solar boost kit (SE-EV-KIT-V3UPG-01) is required for connection to standard SolarEdge Home Wave inverters.

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EV CHARGER SPECIFICATIONS			
Charging Mode	AC Level 2		
Rated AC Power Output	9.6	kW	
Maximum Continuous Output Current @240Vac	40 ⁽¹⁾	А	
Nominal AC Output Voltage @240Vac	240 ⁽²⁾	Vac	
Nominal AC Frequency	60	Hz	
Ground Fault Detection Threshold	5	mA	
Supported Communication Interfaces	Wi-Fi (built-in antenna included) ⁽³⁾ , Ethernet, RS485 and Cellular (optional) ⁽⁴⁾		
CABLE SPECIFICATIONS			
EV Connector	SAE J1772-2009		
Length	25 / 7.6	ft/m	
Weight	12.5 / 5.7	lb/kg	
FEATURES SUPPORTED WITH COMPATIBLE SO	DLAREDGE INVERTERS	<u> </u>	
Smart Energy Management	Smart schedules, excess solar charging ⁽⁵⁾ , solar boost mode		
ADDITIONAL FEATURES			
Status LEDs, Fault Indicator	Yes		
Unplugging Detection	Yes, current termination according to SAE J1772		
Ground Connection Monitoring	Yes, continuous		
Monitoring and Control	Installer commissioning via SetApp		
STANDARD COMPLIANCE	Homeowner configuration, controls and monitoring via mySolarEdge mobile app		
EMC EMC	FCC Part 15 Class B		
Safety	UL2594, UL2231-1, UL2231-2, NEC Article 625 compliant, CSA C22.2#280		
Energy Star™	Certified - SE-EV-SA-US-40		
INSTALLATION SPECIFICATIONS			
AC input	NEMA 6-50 / NEMA 14-50 / Hardwired		
Dimensions (H x W x D)	12 x 7.3 x 6 / 309 x 154	in / mm	
Weight	6.3 / 2.85	lb / kg	
Protection Rating (connected to EV or with dust cap)	NEMA 3R		
Operating Temperature Range	-22 to +122 / -30 to +50	°F/°C	

⁽¹⁾ Additional available settings: 16A, 24A, 32A and 40A

⁽⁵⁾ When SolarEdge Home EV Charger is connected to the inverter, an import/export meter is required for controlled excess solar charging

ORDERING INFORMATION		
PRODUCT NUMBER	DESCRIPTION	
SE-EV-SA-KIT-LJ40N	SolarEdge Home EV Charger – including cable and holder. NEMA 14-50 AC plug	
SE-EV-SA-KIT-LJ40P	SolarEdge Home EV Charger – including cable and holder. NEMA 6-50 AC plug	
SE-EV-KIT-25J40-2	Replacement EV charging cable	
SE-EV-HLD-T1-V2	Replacement cable holder	

⁽²⁾ Connected to L1, L2, G; No need for neutral

⁽³⁾ To extend Wi-Fi communication, use optional Wi-Fi antenna. For antenna specification refer to: https://www.solaredge.com/sites/default/files/se-wifi-zigbee-wireless-antenna-datasheet-na.pdf

⁽⁴⁾ Optional cellular kit can be ordered