

Smart EV Charger

For North America

SE-EV-SA-KIT-LJ40P



SMART ENERGY

Smart EV Charging with SolarEdge

- Wi-Fi enabled, level 2 charging station, with up to 40A (9.6kW) charging power
- Full charging control, including remote activation, smart scheduling, and LED charging status
- 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 100% renewable energy by using excess-solar mode⁽⁴⁾
- Synchronizes with the full SolarEdge ecosystem (PV, StorEdge, and smart home devices), all managed by a single mobile app
- Ideal in cases where the inverter is located far from the vehicle

⁽¹⁾ Charging cable is subject to limited warranty terms, for more information please refer to: <https://www.solaredge.com/warranty>

⁽²⁾ Hardwired installation by professional installer only

⁽³⁾ Connection to standard HD-Wave inverters (Non-StorEdge) via dedicated upgrade kit

⁽⁴⁾ SolarEdge import/export meter is required for controlled excess solar charging

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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⁾	Aac
Nominal AC Output Voltage	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⁾	
FEATURES SUPPORTED WITH INTEGRATED SOLAREEDGE INVERTER		
Smart Energy Management	Controlled excess solar charging ⁽⁵⁾	
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	Installer commissioning via SetApp Homeowner configuration controls and monitoring via mySolarEdge app	
STANDARD COMPLIANCE		
Emissions	FCC Part 15 Class B	
Safety	UL2594, UL2231-1, UL2231-2, NEC Article 625 compliant	
EV Charger	SAE J1772	
INSTALLATION SPECIFICATIONS		
AC Connection plug	NEMA 6-50	
EV Charger Connector	SAE J1772-2009	
EV Charger Dimensions (H x W x D)	12 x 7.3 x 6 / 309 x 190 x 154	in / mm
EV Charger Weight	6.3 / 2.85	lb / kg
EV Charger Cable Length	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	F / °C
Protection Rating (connected to EV or with dust cap)	NEMA 3R	

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

(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.

(5) When Smart EV Charger is connected to inverter, Import/Export meter is required for controlled Excess Solar charging.