

# Smart 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<sup>(1)</sup>
  - Rated for indoor or outdoor use
  - Plug-in unit, easily modified to support hardwired installations<sup>(2)</sup>
  - Suitable for use with or without a SolarEdge PV system
- Optimized charging, when connected to a SolarEdge inverter<sup>(3)</sup>:**
- Charges EV with up to 100% renewable energy by using excess-solar mode<sup>(4)</sup>
  - 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<sup>(3)</sup>

(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 Energy Hub and HD-Wave inverters only. A dedicated solar boost kit (SE-EV-KIT-V3UPG-01) is required for connection to standard HD-Wave inverters

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

# Smart EV Charger

## For North America

| EV CHARGER SPECIFICATIONS                 |   |     |
|---|---|-----|
| Charging Mode                             | AC Level 2  |     |
| Rated AC Power Output                     | 9.6   | kW  |
| Maximum Continuous Output Current @240Vac | 40 <sup>(1)</sup>   | A   |
| Nominal AC Output Voltage @240Vac         | 240 <sup>(2)</sup>  | Vac |
| Nominal AC Frequency                      | 60  | Hz  |
| Ground Fault Detection Threshold          | 5   | mA  |
| Supported Communication Interfaces        | Wi-Fi (built-in antenna included) <sup>(3)</sup> , Ethernet, RS485 and Cellular (optional) <sup>(4)</sup> |     |

| CABLE SPECIFICATIONS |                |         |
|----------------------|----------------|---------|
| EV Connector         | SAE J1772-2009 |         |
| Length               | 25 / 7.6       | ft / m  |
| Weight               | 12.5 / 5.7     | lb / kg |

| FEATURES SUPPORTED WITH COMPATIBLE SOLAREEDGE INVERTERS |  |  |
|---|--|--|
| Smart Energy Management                                 | Smart schedules, excess solar charging <sup>(5)</sup> , 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<br>Homeowner configuration, controls and monitoring via mySolarEdge mobile app |  |

| STANDARD COMPLIANCE |  |  |
|---------------------|--|--|
| 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 190 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           |         |

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

(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 the inverter, an import/export meter is required for controlled excess solar charging

| ORDERING INFORMATION |  |
|----------------------|--|
| Product Number       | Description  |
| SE-EV-SA-KIT-LJ40N   | Smart EV Charger- including cable and holder. NEMA 14-50 AC plug |
| SE-EV-SA-KIT-LJ40P   | Smart 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   |