

# EV Charging Station FACT SHEET



## Overview

Over the next 5 years, virtually every automobile manufacturer plans to introduce a plug-in hybrid or battery electric vehicle. GE will supply the charging station infrastructure to support this industry change. The EV Charging Station's design is suitable for various locations. This product offers Level II charging, which is capable of reducing charge time from 12-18 hours to 4-8 hours, with service needs of 208-240VAC at 40A, assuming a 24kWh battery and a full-cycle charge. GE has more than 100 years of experience in the design and manufacture of electrical distribution products and, as a result, can supply all necessary upstream infrastructure.

## Mounting options

- The double pedestal option offers two charging stations in the space of one, so two drivers can charge simultaneously at one station.
- The single pedestal option is designed for parking lots and sidewalks, so users can easily access charging stations while in their parking spaces.
- The pole option is for areas where restrictive sidewalk space calls for alternative solutions. This option can be mounted on a lamppost or any other structure.
- The wall option is for areas with limited floor space and for residential garages. Parking garages will be able to install wall mounted units to provide drivers with the ability to charge while parked.

## Product features and benefits

The EV Charging Station's basic features are upgradeable, resulting in a robust and reliable solution for EV charging infrastructure.

- The cord holder keeps the cord organized and out of the way of parking spaces, sidewalks and streets.
- LEDs display status: Green = Station active; Blinking green = Vehicle connected, not charging; Amber = Charging; Red = Fault occurred.
- Option for a Radio Frequency Identification (RFID) reader: users will gain charging authorization by waving RFID cards in front of the readers.
- Ethernet network offered for RFID authorization.
- RFID software registers usage of the EV Charging Station, enabling data collection and monitoring status of communication between RFID and EVSE.
- Vacuum Fluorescent Display (VFD) screen shows greetings, instructions and station messages.
- Nuisance tripping avoidance and auto re-closure.
- Vehicle ground monitoring circuit.
- Single phase metering, displayed on included VFD.
- A building ventilation interface signal can be provided to operate facility and garage fans when required.

## Standards and approvals

- SAE J1772
- NEC 625
- UL 2202, 2231, 2251, 2594
- cUL
- NEMA and NIST



## EV Charging Station Preliminary Specifications

SAE Compliant	Level II per J1772
Vehicle Interface	SAE J1772 EV connector
Cable Length	20 feet
AC Charging Power Output	7.2kW (240VAC @ 30A)
Voltage and Current Rating	208-240VAC @ 30A
AC Power Input	208-240VAC requiring only Line 1, Line 2, and Earth ground
Recommended Service Panel Breaker	Pole, Wall, Single Pedestal: 2-pole 40A breaker on dedicated circuit
	Double Pedestal: (Qty. 2) 2-pole 40A breaker on dedicated circuit
Ground Fault Protection	Internal 20mA CCID with auto re-closure, does not require a GFCI in service panel
Cold Load Start	Random start up between 0 and 15 minutes
Local Area Network	CAT5 Ethernet
Network Communication Protocol	TCP/IP
Network Security	GE recommends that network be VPN and Firewall protected
Metering Accuracy	2% accurate on voltage and current; 4% accurate on power and energy
RFID Reader	ISO 15693 compliant
Display Screen	Vacuum Fluorescent Display
Standby Power	5W typ.
Indoor Ventilation	Signal provided to turn on facility fans
Outdoor Rated	NEMA 3R
Safety Compliance	UL 2231, UL 2594, NEC 625, SAE J1772
Surge Protection	6kV @ 3,000A
EMI Compliance	FCC Part 15 Class A
Operating Temperature	-30°C to +50°C ambient
Operating Humidity	Up to 95% non-condensing
Approximate Shipping Weights	Single Pedestal: 90 lbs
	Double Pedestal: 90 lbs
	Pole: 45 lbs
	Wall: 45 lbs
Dimensions	Single Pedestal: 51.1"H x 14.9"W x 13.8"D
	Double Pedestal: 51.1"H x 14.9"W x 13.8"D
	Pole: 31.52"H x 11.82"W x 11.16"D
	Wall: 31.52"H x 11.82"W x 11.16"D

### Selection

All units are 208-240V, 30A out, single phase integrated meter

Type	Enclosure	Connectors	RFID	Cat. No.	List Price, GO-150A
Single Pedestal	NEMA 3R	1	No	EVS N3	\$6,250
			Yes	EVS RN3	\$7,188
Double Pedestal	NEMA 3R	2	No	EVD N3	\$9,375
			Yes	EVD RN3	\$10,313
Pole	NEMA 3R	1	No	EV P N3	\$4,838
			Yes	EV PR N3	\$5,175
Wall	NEMA 3R	1	No	EV W N3	\$4,500
			Yes	EV WR N3	\$4,838

### Accessories

Accessory	Description	Cat. No.	List Price, GO-150A
RFID Cards	White Design - Qty. 50	EVRCW50	\$100
	GE Design - Qty. 50	EVRCG50	\$100
RFID Reader	USB Enrollment Reader	EVRR1	\$200

Information provided is subject to change without notice. Please verify all details with GE. All values are design or typical values when measured under laboratory conditions, and GE makes no warranty or guarantee, express or implied, that such performance will be obtained under end-use conditions.



imagination at work