

DuraStation™ EV Charger 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 DuraStation'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 DuraStation'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 DuraStation, 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 2231, 2251, 2594
- cUL 2231, 2594
- NEMA and NIST



DuraStation™ EV Charger 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
Short Circuit Rating	5kA @ 240VAC
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 2251, UL 2594, cUL 2231, cUL 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: 140 lbs
	Double Pedestal: 175 lbs
	Pole: 75 lbs
	Wall: 75 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.
Single Pedestal	NEMA 3R	1	No	EVSN3
			Yes	EVSRN3
Double Pedestal	NEMA 3R	2	No	EVDN3
			Yes	EVDRN3
Pole	NEMA 3R	1	No	EVPN3
			Yes	EVPRN3
Wall	NEMA 3R	1	No	EVWN3
			Yes	EVWRN3

Accessories

Accessory	Description	Cat. No.
RFID Reader	Enrollment reader CM5321CL – 13.45MHz (comes with CD and pack of GE RFID cards)	EVRP01
	Enrollment reader CM5325CL USB reader – 125kHz (comes with CD)	EVRP02
	Enrollment reader RP40 (comes with CD and pack of GE cards)	EVRP03
RFID Software	CD with RFID EV100 software	EV100CD
RFID Cards	Pack of 10 white RFID cards	EVRCW10
	Pack of 10 GE-designed RFID cards	EVRCG10

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