

Siemens electric vehicle make-ready solutions

Siemens VersiCharge™ residential and commercial applications

Make-ready electrical solutions

Siemens offers an extensive array of electrical infrastructure and eMobility[®] solutions designed for any transportation electrification project worldwide.

Our extensive lineup of electric vehicle (EV) chargers for the level two, level three, and fleet/eBus applications can be easily coupled with Siemens electrical equipment (make-ready) to provide a proven, integrated offering that will future proof your installations.

While the world of EV charging is new to many of our customers, Siemens has a long history of designing and supporting the electrical infrastructure for these applications. For over 170 years, Siemens has been designing and deploying electrical infrastructure in projects of all sizes — from single-family homes to hospitals, airports, and office buildings. Siemens can provide the complete PlugtoGrid™ EV infrastructure, from stand-alone charging, to full-scale commercial charging solutions. These projects can include project design, the electrical infrastructure, networking components, support services and a complete, cloud-solution portfolio for monitoring, control and billing.

Siemens is your integral make-ready partner in transportation electrification.

Siemens VersiCharge make-ready applications:

- Workplace charging
- Parking lot / facility / fleet charging
- Condominiums / homes / group metering applications.



All Rights Reserved. © 2020, Siemens Industry, Inc.

1. Workplace applications



Benefits:

- Siemens solution across the portfolio
- Lighting panel with optional SEM3[™] for embedded metering
- Pedestal mounting available for the VersiCharge units
- Dedicated power for each VersiCharge no load sharing
- Simple addition of a 50A (for 40A charger) or 60A (for a 48A charger) two-pole breaker powers each VersiCharge.

2. Parking lot / facility / fleet applications







EV chargers

400 A-800 A solution

Benefits:

- Integrated power system (Siemens IPS) panelboard and transformer for reduced installation time
- Compact footprint
- Optional embedded utility-metering compartment
- Future-proof installation with room for additional circuit breakers.
- Each VersiCharge will require a 208/240V, 50A or 60A two-pole breaker.











1,200 A + solutions includes SEM3 embedded metering, remote monitoring plus communication

Benefits:

- Ability to communicate MODBUS/TCP/IP out for remote operation of main circuit breaker
- Siemens Integrated Power System (IPS) panelboard and transformer for reduced installation time
- SEM3[™] embedded metering for monitoring each individual charger or group of chargers
- Compact footprint skinny main up to 2,500 A
- Optional embedded utility-metering compartment
- Future-proof installation with room for additional circuit breakers.
- Each Versicharge will require a 208/240V, 50A or 60A two-pole breaker.

3. Residential EV Charger applications



Single family:

The most common installation is adding a dedicated two-pole 50 A or 60 A circuit breaker to a new/existing load center, or meter combination. This is connected to either a 240V, NEMA 6-50 type receptacle for the 40A charger or directly to the charger for the 48 A version. See figures 1 and 2.

If the car charger needs to be metered by the utility company separately, a Talon meter pedestal can be installed between the load center/meter combination and the car charger (see figure 3).

For Electric Utility Service Equipment Requirements Committee (EUSERC) areas, the EV car charger UNI-PAK product can be mounted on the outside of the house allowing separate metering and loading for the house and car charger (see figure 4).



3. Condo / multifamily / group metering applications

 Meter main

Multiuse:

- A small number of car chargers located near multiple buildings. Adding one or more meter stacks to an existing group metering lineup can be used to supply and meter each charger (see figure 4).
- A large number of car chargers located in a separate parking area (i.e., parking deck). Several methods can be used to supply and meter each charger. One is to install a completely separate group-metering service with the purpose of feeding and metering each charger. Other methods are similar to the installations for high-density or workplace-applications (refer to pages 2-3) (see figure 5).
- A Siemens 6 unit Uni-PAK option can also be used for group-metering applications.



Figure 5

Figure 4

VersiCharge[™] electric vehicle charging portfolio



Residential VersiCharge

- 9.6kW or 11.5kW models
- NEMA 4 Outdoor rated
- Six different adjustable power settings
- LED MHI status lights
- 20-foot cord with J1772 plug ٠
- . UL & Energy Star Rated
- 3 Year Warranty

Catalog Numbers:

(Parent):

but adds:

9.6kW (40A) 8EM1312-4AF10-OAA3 11.5Kw (48A) 8EM1312-5AF10-OAA3

Commercial VersiCharge

card provided by owner)

• 9.6kW or 11.5kW models



Residential VersiCharge (Smart):

- 9.6kW or 11.5kW models
- Same features as the Basic model but adds:
 - Wi-Fi and Ethernet communications
 - ANSI C12.20 metering accuracy
- OCPP protocol for cloud
- management Free mobile App for setup and monitoring
- ISO15118 hardware ready

Catalog Numbers:

9.6kW (40A) 8EM1312-4CF18-0FA3 11.5Kw (48A) 8EM1312-5CF18-0FA3

Commercial VersiCharge (Child):

- 9.6kW or 11.5kW models
- NEMA 4 Outdoor rated
- **RFID Reader communicates OCPP** . and Modbus RTU serial
- Wi-Fi and Ethernet communications
- ANSI C12.20 metering accuracy ٠ • Free mobile App for setup and
- monitoring
- ISO15118 hardware ready • Six different adjustable power
- settings
- LED MHI status lights
- 20-foot cord with J1772 plug
- UL & Energy Star Rated
- 3 Year Warranty •

Catalog Numbers:

9.6kW (40A) 8EM1310-4CF14-0GA0 11.5Kw (48A) 8EM1310-5CF14-0GA0

- Included tamper resistant screws for VersiCharge charging unit





Mobile App:

For any VersiCharge with communications, you can utilize the Siemens Mobile App to setup, register, monitor and control the charger. Download on the iOS or Android sites.



Communications are expanded to OCPP 1.6, Modbus RTU serial and ModBus TCP/IP

Providing the need for no

communications wiring.

Catalog Numbers: 9.6kW (40A) 8EM1310-4CF14-1GA1 11.5Kw (48A) 8EM1310-5CF14-1GA1

VersiCharge Pedestals:

- · Mounting post for all VersiCharge variants
- Robust construction for commercial, outdoor use
- Optional cable management systems
- Catalog numbers:
- 8EM3XXXXXX





Siemens complete line of Open (OCPP) communicating charging hardware

Siemens make-ready electrical infrastructure equipment is designed to support any charging application and all the Siemens charging products. Contact your local Siemens representative to help layout or design you specific installation.



AC chargers Level 2 (L2):

- Name: VersiCharge[™] residential and commercial
- Primarily car market
- Home, workplace, longerterm stop areas
- 9.6kW and 11.5kW Power
- Six times faster than Level 1
- Easy Smart Building/ Control system Integration



DC fast charger Level 3 (L3):

- Name: VersiCharge Ultra™
- Primarily car market
- Malls, fast food, parks, highway corridors, etc.
- 50 kW and 175 kW
- Half an hour to charge
- Built in the U.S.



DC heavy-duty bus plug-in:

- Name: VersiCharge MaxxHP™
- Fleet vehicle, bus depots
- 150 kW/high voltage
- Up to four remote dispensers
- One to four hours to fully charge
- Cloud IoT monitoring
- Built in the U.S.

Opportunity charging bus overhead:

- Name: VersiCharge Apex[™]
 VersiCharge Go[™]
- MDHD (medium-heavy-duty) overhead – top down
- On-route charging
- 300 kW 600 kW
- Minutes to charge
- Built in the U.S.

Published by Siemens Industry, Inc. 2020

Siemens Industry, Inc. 3617 Parkway Ln Peachtree Corners, GA 30092

For more information, including service or parts, please contact our Customer Support Center. Phone: +1 (800) 333-7421

usa.siemens.com/VersiCharge Article No. SIDS-B40006-00-4AUS Printed in USA All Rights Reserved © 2020, Siemens Industry, Inc.

The technical data presented in this document is based on an actual case or on as-designed parameters, and therefore should not be relied upon for any specific application and does not constitute a performance guarantee for any projects. Actual results are dependent on variable conditions. Accordingly, Siemens does not make representations, warranties, or assurances as to the accuracy, currency or completeness of the content contained herein. If requested, we will provide specific technical data or specifications with respect to any customer's particular applications. Our company is constantly involved in engineering and development. For that reason, we reserve the right to modify, at any time, the technology and product specifications contained herein.