

The implementation and growth of the eTruck and eBus market is happening at a rapid pace. This critical public infrastructure change has brought about the need for a fast, safe, and user-friendly charging solution.

Siemens DC heavy-duty fleet chargers supply the needed open communications, flexible charging equipment, Internet of Things (IoT) cloud monitoring, and energy optimization services that are all part of our PlugtoGrid™ transportation electrification offering.

Main advantages:

- A fast, high-efficiency charging solution at 150 kW
- DC charging with CCS1 compatible plug
- Battery charging status and power delivered are displayed
- Built in USA Buy America compliant
- Easy integration to any Open Charge Point Protocol (OCPP) compatible IoT platforms
- Supports up to four remote dispensers using sequential charging with one main power cabinet
- Integrated cellular modem for remote connectivity

Fleet Charging Options



Plug in charger



Indoor Pantograph



Outside Pantograph

MaxxHP heavy-duty fleet charger design

Built for flexible installation and easy maintenance

Modular architecture and versatility

A variety of configurations are available when using the NEMA 3R main power cabinet and remote dispenser configurations with advanced high speed fault protection.

Smart, secure, and safe

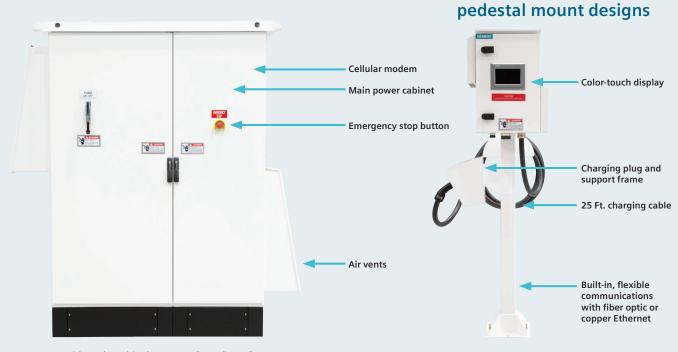
Integrated technology will control charging of up to four vehicles in sequential fashion reducing the need for additional electrical infrastructure. System administration is password protected and follows the strict DIN 70121 standard for charging.

Remote access and supervision

Industry standard OCPP communications allow integration with any IoT system anywhere in the world.

Remote dispenser - wall or

MaxxHP charger main power cabinet



cabinet size with air vents: 78" X 49" X 82" cabinet size without air vents: 55" X 49" X 79"

Sample operator displays

The remote dispenser color-touch display allows easy monitoring and control of the charging process. Displays will provide charging status, energy consumption, alarms, charger info, emergency stop, and more.







Charger HMI Main

Charger HMI Settings

Charger HMI Advanced Settings

MaxxHP heavy-duty fleet charger details

Technical Specifications

| | 160kW |
|--|---|
| Nominal Input | |
| Voltage | 3 phases + PE,480 Vac ±10% |
| Maximum AC current per phase | 220 A |
| Frequency | 60 Hz |
| Power factor | > 0.99 |
| Total harmonic distortion | <4% at 200 A |
| DC Output (with advanced fault protection) | |
| Maximum DC Current | 200 A |
| Voltage range | 200 Vdc to 850 Vdc |
| Ripple | Less than 1% of the nominal voltage |
| Efficiency | >95% (@ rated power) |
| Environmental Conditions | |
| Ambient Temperature | -25°C to +50°C $-$ start from cold -35°C to -25°C $-$ equipment has been continuously running |
| Operation temperature | -13°F to + 131°F of environment temperature |
| Storage temperature | -40°C to + 70°C |
| Humidity | 5 - 95% of relative humidity without condensation |
| Place of installation | Indoor/Outdoor |
| Altitude | 0 – 6,562 ft in operation |
| Mechanical Specifications | |
| Protection | IP54 / NEMA 3R |
| Overall dimensions W x D x H (inches) | cabinet size with air vents: 78" X 49" X 82" cabinet size without air vents: 55" X 49" X 79" |
| Approx. weight | 5,291 lbs |
| General Specifications | |
| Noise level | < 55 dB |
| Automation system | Siemens SIMATIC S7-1200 |
| Local Interface (MMI) | Siemens SIPLUS HMI TP700 |
| Remote maintenance | Web Server via IP |
| Remote Access Cellular 4G/LTE | OCPP 1.6 (JSON) |
| Charging standard | EN61851-1/23/24, DIN 70121 |
| Connectors | CCS1 (standard 25 ft. length) |
| Dispensers | Up to four dispensers per charging station |
| Dispenser communications | Single mode Fiber Optic (up to 656 ft.) or Copper CAT6 (up to 328 ft.) |
| | |

^{*}UL UL2231 / UL2202 Certification (pending).



Depot charger application with Siemens SaaS



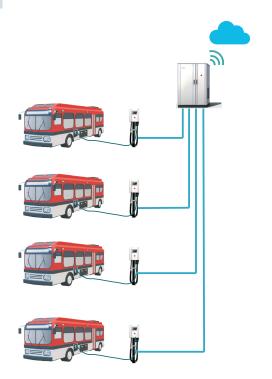
Smart charging dashboard



Transaction dashboard



Overview dashboard



Siemens SaaS Features



- Remote support and diagnostics
- į
- Charger notifications SMS/email
- Customer monitoring / reporting on any web browser



Energy optimization

Transit depot solutions

Siemens pantograph designs and battery storage starting at 250kWh provide flexibility in designing your transit depot solutions.



Street level pantograph



Ceiling mount pantograph



Battery energy storage

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