

## MaxxHP Heavy-Duty Fleet Chargers Plug-In, fast charging solutions

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Plug-In, fast charging solutions

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. These are all part of our PlugtoGrid<sup>™</sup> 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 North America
- 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

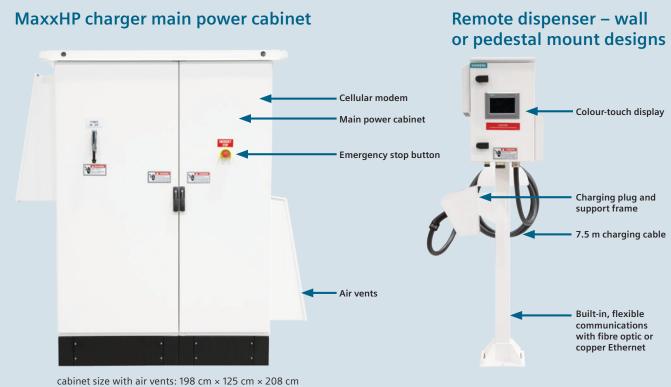
A variety of configurations are available when using the NEMA 3R main power cabinet and remote dispenser configurations with advanced high speed fault protection.

#### 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.



cabinet size with air vents: 198 cm × 125 cm × 208 cm cabinet size without air vents: 140 cm × 125 cm × 200 cm

#### Sample operator displays

The remote dispenser colour-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.



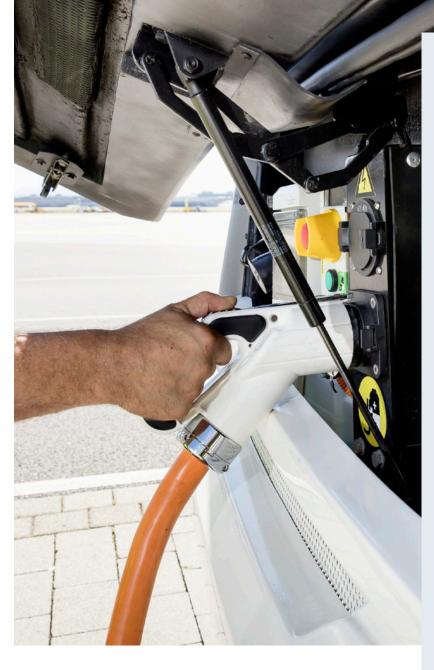


#### Charger HMI Settings









## MaxxHP heavy-duty fleet charger details

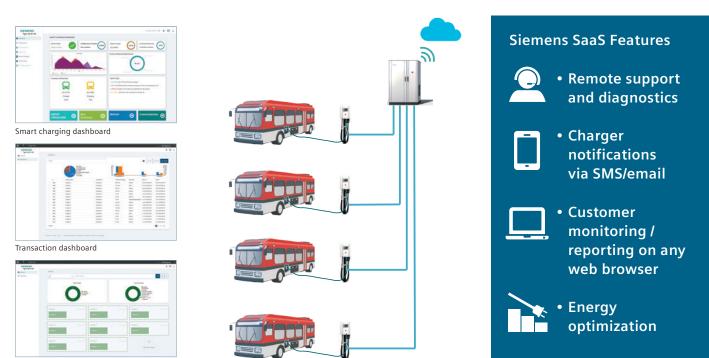
**Technical Specifications** 

	160 kW
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	
Operation temperature	-25°C to +55°C of environment temperature
Storage temperature	-40°C to +70°C
Humidity	5–95% of relative humidity without condensation
Place of installation	Indoor/Outdoor
Altitude	0–2,000 m in operation
Mechanical Specifications	
Protection	NEMA 3R
Overall dimensions (W $\times$ D $\times$ H)	cabinet size with air vents [cm]: $198 \times 125 \times 208$ cabinet size without air vents [cm]: $140 \times 125 \times 200$
Approx. weight	2,400 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 7.5 m length)
Dispensers	Up to four dispensers per charging station
Dispenser communications	Single mode fibre optic (up to 200 m) or copper CAT6 (up to 100 m)
*UILUI 2231 / UI 2202 Certification (pending)	

\*UL UL2231 / UL2202 Certification (pending).

# Depot charger application with Siemens SaaS





Overview dashboard

#### **Transit depot solutions**

Siemens pantograph designs and battery storage starting at 500 kWh provide flexibility in designing your transit depot solutions.



Street level pantograph



Ceiling mount pantograph



Battery energy storage

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