SICHARGE UC

Modular and powerful DC charging for electric fleets

usa.siemens.com/sichargeuc

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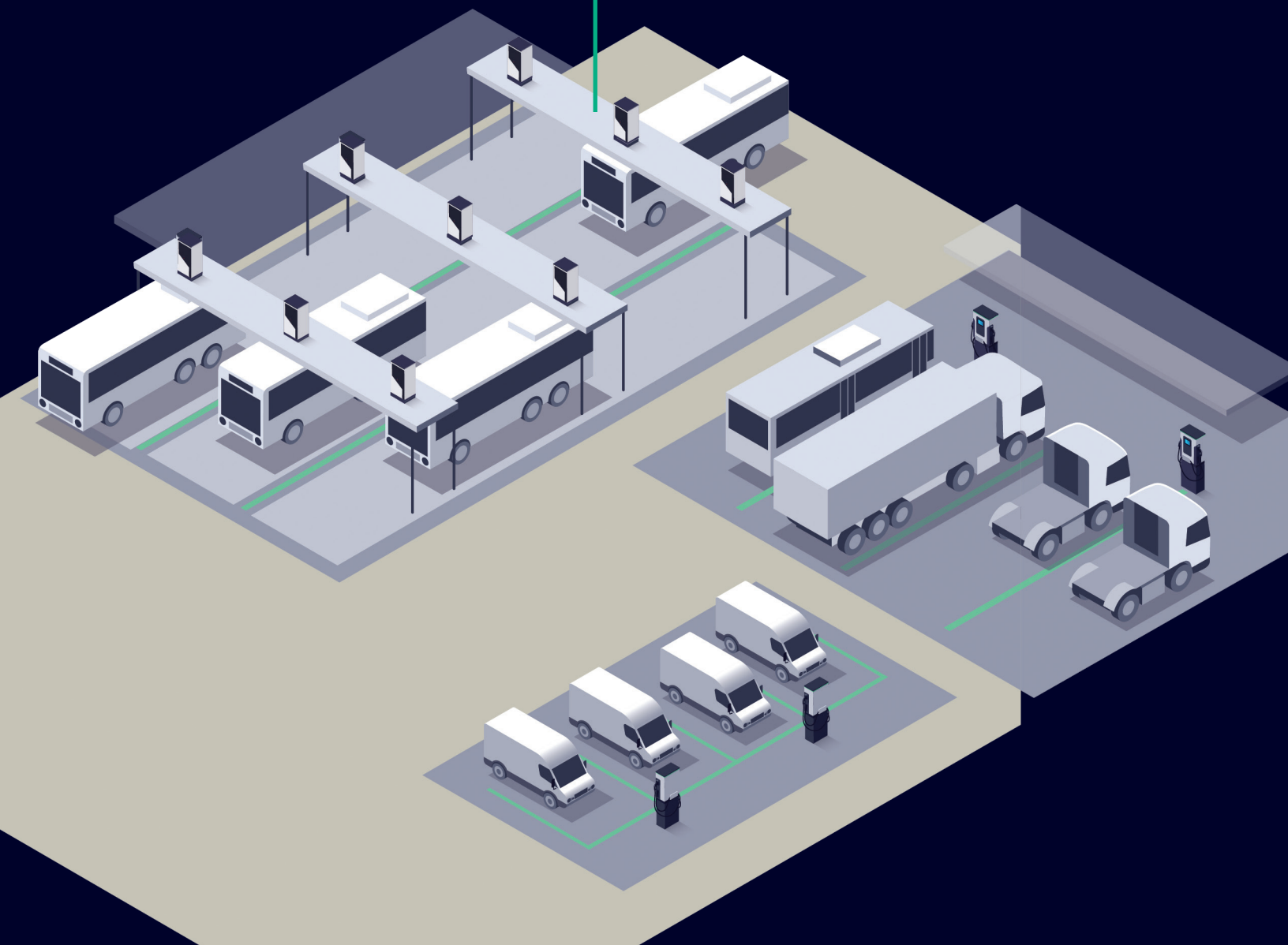
SIEMENS

Your fleet: Always ready to go

Powerful and reliable, SICHARGE UC offers 150 kW of flexible EV charging solutions for buses, trucks, and heavy-duty vehicles. It offers you fast, secure charging, interoperability, and is manufactured in the USA. Each SICHARGE UC charging center can power up to four charging dispensers with easy installation and seamlessly integrate with Siemens Depofinity cloud-based solutions or other OCPP compliant platforms.

Depot charging

Vehicles generally spend at least several hours during the day or night at a central depot and can be charged based on the needs of their schedule.



Charging system tailored to your needs

The flexible charging system supports you with easy integration into existing depots. It overcomes any space constraints and provides you with the ideal charging infrastructure to keep your electric fleet is up and running on time.

Sequential charging

SICHARGE UC provides sequential charging with up to 4 dispensers. Sequential charging utilizes a single charging center that connects to multiple vehicles via multiple dispensers. All charging power is allocated to only one vehicle at a time, and vehicles are charged in sequence based on how much battery is remaining.

Benefits include:

- High power is delivered to the vehicle to maximize vehicle availability
- Requires less upfront electrical requirements lowering investment costs.
- Faster deployment of vehicles
- Minimizes safety risks

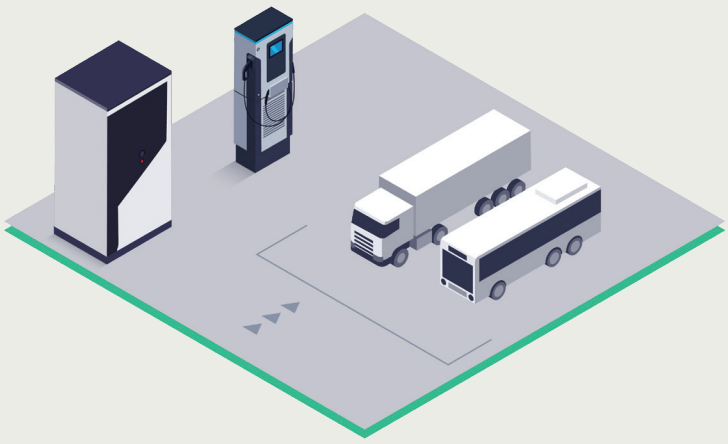
Most buses and trucks in the market today only allow 120 kW - 180 kW max charging power.

Charging curve

Most electric vehicle manufactures limit the charging power rate to 80% battery capacity and then ramp down the charge rate to about 10 kW to complete the remaining 20%. This is designed to protect the battery.

Compact charging

SICHARGE UC 150 compact dispenser with integrated cable – simple and direct connection of the charger to your eVehicle.



Check out the valuable features of our comprehensive depot solutions.

Charging center

The charging center is the core of your system. The compact design fits into a variety of configurations, making the best use of limited space in a plethora of applications.

SICHARGE UC 150 charging center highlights

- High degree of protection (NEMA 3R) against dust and spray water
- LED strip to indicate charging status
- Emergency Stop button
- Durable galvanized steel enclosure with powder-coated paint finish
- Large doors for easy maintenance access
- External breaker handle
- Option for side entry
- Supports up to four dispensers sequentially
- Cellular and Ethernet communication
- Compact size for easy installation
- Manufactured in the US

Technical data (UL)

SICHARGE UC charging center

SICHARGE UC UL		UC 150
AC nominal input		
Voltage	[V]	480 and 600 V AC (3ph + PE)*
Current at nom. voltage per phase	[A]	200A Max
Frequency	[Hz]	60 (+/- 3%) Hz
Power factor	[cos phi]	> 0.98
Short circuit current rating	[kA]	100kA @ 480VAC 35kA @ 600VAC
THDi	[%]	< 5 at full power
DC output		
Rated power	[kW]	150
Voltage (range)	[V]	100...950
Current of connected cables (max.)	[A]	200
Efficiency factor η (at load 100%)	[%]	95.5%....97%
Environmental conditions		
Operational environment		Indoor and outdoor
Operating temperature	[°F]	-13 ..... +113 (-25..... +45 C)
Operating altitude	[m]	2,000 meters above sea level
Humidity	[%]	5...95 (non-condensing)
Mechanical specifications		
Enclosure protection		NEMA 3R
Casting material		Powder-coated cold rolled steel, painted
Color		Main housing: RAL 9010 – Cream white; Roof and base: RAL 9005 – Jet black
Overall dimensions W x D x H	[in]	43 x 39 x 87
Approx. weight acc.to configuration	[lbs]	3170.000
General specifications		
Local user interface		7" HMI
Network connection		Ethernet interface /4G / WLAN
Operating noise level @3 m distance	[dB(A)]	69
Norms and Standards		
Norms and Standards		SAE J1772**, ISO 15118
Communications protocol 2		OCPP 1.6 J ***
EMC standards		IEEE519
Compliance		UL2202; UL2231; CSA 22.2 No. 107.1-16; FCC Part 15

* With output power derating at input voltages below 432 V in 480 V installations or below 540 V in 600 V installations.

** SAE J1772 deviation of requirement 6.2.1.1.

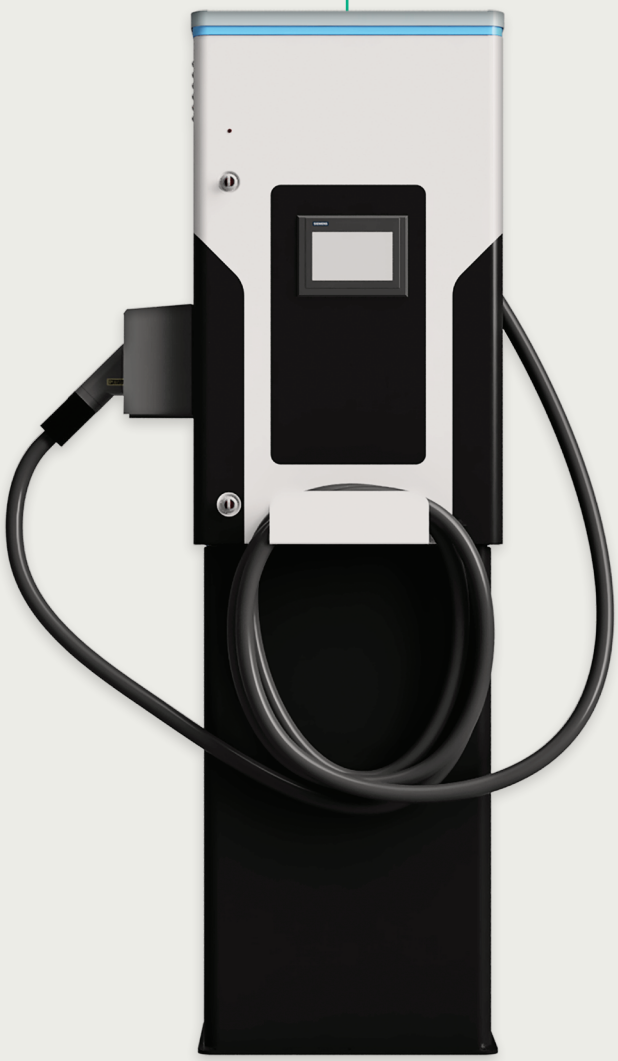
For further questions regarding this topic, please contact your Siemens partner.

*** For supported functionalities of OCPP, Modbus and ISO 15118, please refer to the technical documentation available by your Siemens partner.

Catalog number	Description
8EM40012AA101AA2	SICHARGE UC 150 kW, 480 V - support up to four remote 150 kW dispensers with sequential charging.
8EM40012AA201AA2	SICHARGE UC 150 kW, 600 V- support up to four remote 150 kW dispensers with sequential charging. This is a Canada product for 600V.

Dispensers

The cable-connected dispensers in the SICHARGE UC family are installed close to the vehicle connection and feature a small footprint. For investment and space optimization, several dispensers can be powered in sequence by a single charging center.



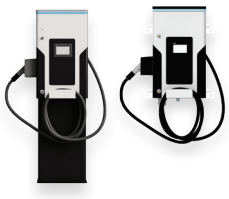
Single-plug dispenser highlights

- Inclined rain protection hood directs water to the rear
- High degree of protection NEMA 3R against dust and spray water
- Covered plug holder
- Multiple options for floor or wall mounting
- Charging status indication by 360-degree LED light
- 7”outdoor touchscreen display at an ergonomic height, accessible and easy to read – even in bright sunlight
- Cable holder for convenient and clean operation
- Power cable for application in congested environments with comfortable length
- 25-ft cable
- Can pair up to four dispensers sequentially per charging center
- Leverages thermoelectric cooling to extend temperature operating range
- UL, cUL, & manufactured in the US

Technical data (UL)

SICHARGE UC dispenser

Air-cooled



Connection options	Dispenser
Design variants	**Air-cooled cables**
DC output	
Connection standard	CCS type 1
Current, A	200
Voltage (range), V DC	100...950
Environmental conditions	
Operating temperature	-13 °F...+113 °F (-25 °C....45 °C)
Mechanical specifications	
	Dispenser
Protection	NEMA 3R
Height, installed (in)	79 (36 for wall mounted)
Footprint on sidewalk (in)	24 x 12
Approximate weight, (lb)	350
General specifications	
Communication standard	PLC
Number of possible connectors (sequential charging)	up to 4
Cable lengths (ft)	25
Compliance	UL; cUL
Charging center connection type	Ethernet copper CAT5 or higher with RJ45 connector or fiber optic with SC type connector
Local user interface	7" touchscreen HMI
Charging status indication	LED

Catalog number	Description
8EM41012JA001GA1	SICHARGE UC Dispenser 150 kW floor model
8EM41012JB001GA1	SICHARGE UC Dispenser 150 kW wall mount version
US2:SICHARGECRSP	Cable retraction system - Pour-in version
US2:SICHARGECRSBO	Cable retraction system - Bolt-on version

Your journey to successful electrification

We support your entire electrification and charging project throughout its lifecycle, from in-depth consulting and intelligent planning to optimized digital solutions for ease of operation and dedicated service packages that give you peace of mind at all times.

Run your operations with digital solutions for efficient charging management

Along with the charging equipment, DepotFinity – our best-in-class digital solutions and services – offers smooth, reliable, and efficient operation of your electric fleet, increasing its uptime while reducing CAPEX and OPEX. Starting with charging operations, our services can be extended with solutions for optimal depot operation, including control of your energy demand and operational costs.

Offer reliable charging operations with cloud-based service packages

Profit from our full-scale service packages that are designed to support the reliability of your business throughout the entire lifetime of your charging equipment - from remote monitoring, management, and diagnostics to onsite support like start up and commissioning services, preventative maintenance and proactive maintenance.

Four reasons to **go electric with SICHARGE UC**

With Siemens, you rely on a global partner who knows the challenges of eMobility® and offers comprehensive solutions for all charging applications.

Contact our experts

Interoperable, future-proof technology

SICHARGE UC is interoperable with all common buses and trucks provided in America.

Flexible, space-saving solutions

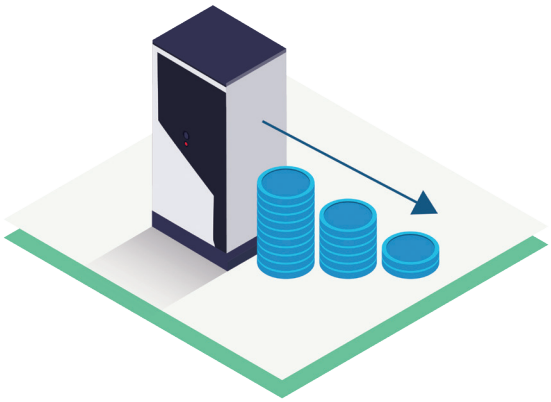
Modular for easy integration with multiple vehicle connection options and an optimized footprint

Robust, durable outdoor design

Ensures equipment longevity, easy outdoor use per NEMA 3R, and the highest fleet availability

CAPEX and OPEX optimization

Efficiently manage your daily operations to optimize your investment.



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About Siemens eMobility

As a one-stop shop for eMobility charging infrastructure, Siemens eMobility offers the whole spectrum of state-of-the-art AC and DC charging hardware, as well as services, ranging from cloud-based solutions to help you manage your charges, as well as support services to keep your chargers up and running. Easily integrate your chargers into the grid with Siemens electrical equipment or renewable energy solutions.

With Siemens' domain know-how in smart buildings and smart grids, we are uniquely positioned to cover the needs of our customers with full-fledged solutions and support them in developing, installing, and managing sustainable charging solutions for a better tomorrow.

Depots have specific requirements in terms of efficiency, speed, performance and reliability of their fleets. Siemens is providing depots of all sizes with robust and high-performance charging infrastructure as well as with the necessary digital solutions to ensure that the electric fleets are always operational and deployable whenever and wherever necessary.

usa.siemens.com/sichargeuc

Legal Manufacturer

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