

SICHARGE UC

Modular and powerful DC charging for electric fleets

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SIEMENS

Your fleet: Always ready to go

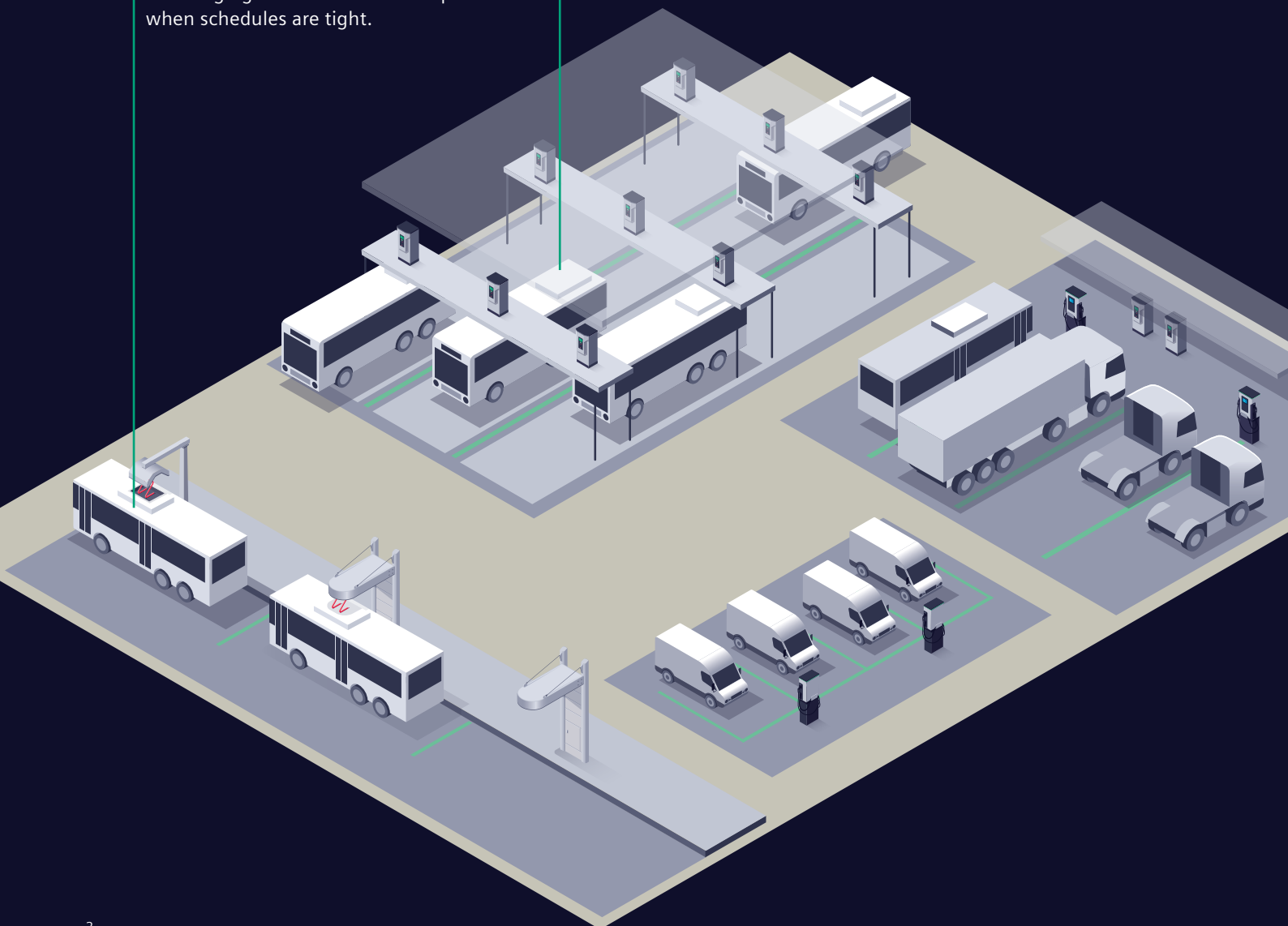
The SICHARGE UC family was specifically designed for charging buses and commercial vehicles at the depot or on-route at selected locations. When and where charging is most reasonable and efficient depends on the routes, charging schedules, and location of electric vehicles. Its modular design, multiple connection options – including dispenser and high-power automated charging with either pantographs or hoods – allows for easy integration into existing charging infrastructures, even with space constraints.

Opportunity charging

High-power automated charging with pantographs or contact hoods is the optimal ultra-fast charging solution. The system can either be configured for charging on-route or in the depot when schedules are tight.

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 directly from a SICHARGE UC compact charger or connected dispenser is ideal for overnight charging at the depot.

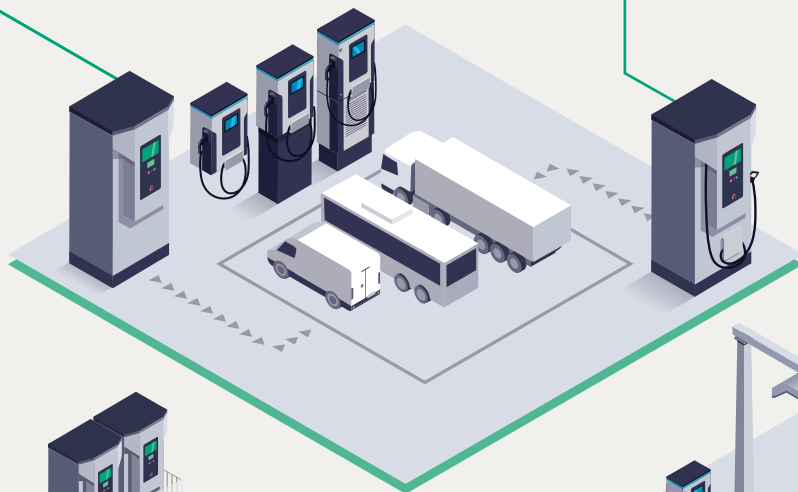


Charging system designed for your needs

The flexible SICHARGE UC charging systems support you with easy integration into existing depots. They overcome your space constraints and provide you with the ideal charging infrastructure for ensuring that your electric fleet is up and running on time.

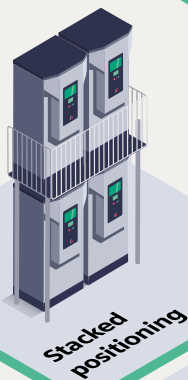
Distributed charging

The SICHARGE UC charging center can power up multiple charging points by using UC dispensers. This cost- and space-saving solution can be flexibly installed on the floor, on the wall, or under the ceiling.



Compact charging

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



Stacked positioning



Back-to-back positioning



Corner positioning



Side-by-side positioning

Modular and scalable ultra-high-power charging

Up to four 150 kW charging centers can be combined to deliver up to 600 kW of DC power from a single charging point.

For rapid charging in the depot or on-route, the SICHARGE UC family offers liquid-cooled dispensers (up to 400 A) or automated solutions like inverted pantographs and contact hoods (up to 800 A).

Check out all the features of our depot solutions



Charging center

The charging center is the core of your system. It contains the charging controller, the DC converters, and an optional direct cable connection to the vehicle. Several other vehicle connections like the cable-based dispenser, inverted pantograph, and contact hood can be powered by this unit.



** Optional: Comes without a cable for other types of vehicle connections*

SICHARGE UC 150 charging center highlights

- 17% smaller dimensions compared with the previous generation for space-constrained sites
- Optimized design concept with large 180° front door opening for convenient service
- Power cable* of an appropriate length up to 10 m with cable holder for easy operation
- High degree of protection (IP54) from dust and spray water
- C4 paint for highly corrosive environments; weatherproof, UV-resistant, color-stable, and scratch-resistant powder coating
- Rain inclination hood
- Emergency DC shutdown button
- Smooth plug handling with ergonomically designed plug holder

Optional

A variety of options are available for SICHARGE UC charging centers:



LED for user guidance and indication of DC charging status



EMC Class B



RFID card reader



Daylight-readable multilingual 10" outdoor touchscreen display IK10



DC charging cable CCS2



Input AC meter, output DC meter

Technical data (IEC)



SICHARGE UC	150C	150	300 (2 x 150)	450 (3 x 150)	600 (4 x 150)
Configuration with cable	Yes	n.a.	n.a.	n.a.	n.a.
Prepared for dispenser connection	n.a.	Yes	Yes	Yes	Yes
Cable lengths	m	3.5; 6; 10	n.a.	n.a.	n.a.
AC nominal input					
Voltage	V	400 ± 10%			
Current at nom. voltage per phase	A	228	456	684	912
Frequency	Hz	50			
Power factor	cos phi	> 0.99			
Short-circuit current rating	kA	10			
THDi	%	< 10			
Network type		TN-C, TN-S, TN-C-S			
DC output					
Rated power	kW	150	300	450	600
Voltage (range)	V	100 ... 1,000			
Current of connected cables (max.)	A	250	500	750	1,000
Efficiency factor η (at load 100%)	%	≥ 96			
Environmental conditions					
Operating environment		Indoor and outdoor			
Operating temperature	° C	-25 ... +45			
Operating altitude	m	2,000 above sea level			
Relative humidity	%	5 ... 95 (non-condensing)			
Mechanical specifications					
Enclosure protection		IP54, IK10			
Housing material		Painted steel and stainless steel			
Coating		C4H (suitable for operation in industrial areas and coastal areas with moderate salinity)			
Color		Main housing: RAL 9006 – white aluminum; roof and base: RAL 9017 – Traffic black matte			
Approx. overall dimensions ¹⁾					
W x D x H	mm	919 x 908 x 2,058	1,848 x 908 x 2,058	2,777 x 908 x 2,058	3,706 x 908 x 2,058
Approx. foundation dimensions ¹⁾					
W x D	mm	919 x 719	1,848 x 719	2,777 x 719	3,706 x 719
Approx. weight acc. to configuration	kg	1,250	2,500	3,750	5,000
General specifications					
Local user interface		10" touchscreen HMI and status LED (optional)			
User authentication and payment		RFID offline and online (optional)			
Network connection		Ethernet interface; 3G and 4G			
Electric safety device		RCD Type B (optional)			
Operating noise level					
@ 3 m distance	dB(A)	Up to 62 in normal operation, low-noise mode 50 (optional)			
Norms and standards					
Charging standards		EN 61851-1/23/24, ISO 15118 (DIN 70121) ²⁾			
Communication protocol ²⁾		OCPP 1.6J, Modbus TCP ²⁾			
EMC standards		EN 61000-6-2, -3, -4, -5, and -6			
EMC class		EMC Class A, Class B (optional)			
CE certification		Yes			

eVehicle connection possibilities with sequential charging operation

Charging Center UC 150C	Comes with integrated CCS2 DC plug with no other charging connection options
Charging Center UC 150	Up to 4 charge points with air-cooled cable Up to 3 charge points with air-cooled cable + 1 charge point with air-cooled cable with contact hood 1 contact hood or 1 inverted pantograph
Charging Center UC 300	Up to 2 charge points with liquid-cooled cable ³⁾ 1 contact hood or 1 inverted pantograph
Charging Center UC 450, UC 600	1 contact hood or 1 inverted pantograph

1) With side-by-side positioning

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

3) More than one dispenser connection available with an additional engineering solution.

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, dispenser can be delivered in a single- or dual-plug configuration and several dispensers can be powered in sequence by a single charging center.



Single-/dual-plug dispenser highlights

- Second CCS2 DC charging cable with covered plug holder at a dual-plug version
- Built for outdoor use with IP54 degree of protection from dust and spray water
- Multiple options for floor, wall, or under-ceiling mounting
- Charging status indication by 360° LED light
- Inclined rain protection hood directs water to the rear
- Cable holder for easy and clean operation
- Power cable for use in convenient length in different variations

Optional

The following option is available:



10" daylight readable touchscreen display at an ergonomic height with the new design of HMI

Technical data (IEC)



Floor-mounted dispenser

Wall- and ceiling-mounted dispenser

Liquid-cooled cable dispenser

	Floor-mounted dispenser	Wall- and ceiling-mounted dispenser	Liquid-cooled cable dispenser
Configuration	Single-/dual-plug		Single-plug
Cable variants	Air-cooled cables		Liquid-cooled cables
Cable lengths	m	3.5; 6; 10	5
DC output			
Connection standard	CCS type 2 plug		
Rated power	kW	100/150	300
Voltage (range)	V	100 ... 1,000	
Current of connected cables (max.)	A	125/250	400
Peak auxilliary power consumption at 230 V	W	41	1,216
Standby power consumption @ 25° C	W	32	
Environmental conditions			
Operating environment	Outdoor and indoor		
Operating temperature	° C	-25 ... +45	
Operating altitude	m	≤ 2,000 above sea level (without derating)	
Relative humidity	%	5 ... 95 (non-condensing)	
Mechanical specifications			
Enclosure protection	IP54, IK10		IP54, IK10 for housing, IK09 for HMI
Housing material	Painted steel and stainless steel		
Coating	C4H (suitable for operation in industrial areas and coastal areas with moderate salinity)		
Color	Main housing: RAL 9006 – white aluminum; roof and base: RAL 9017 – Traffic black matte		
Overall dimensions W x D x H	mm	600 x 300 x 2,000	600 x 300 x 2,000
Approx. weight acc. to configuration	kg	110/133	180
General specifications			
Local user interface and LED	10" touchscreen HMI and status LED		7" touchscreen HMI and status LED (optional)
Network connection	Ethernet/optical fiber (optional)		
Max. allowed cable length between charging center and dispenser	m	100	
Norms and standards			
Charging standards	IEC 61851-1/23/24		
Communication protocol	ISO 15118-1/2/3 (DIN 70121)		
CE certification	Yes	Yes	Yes

Inverted pantographs and hoods

Inverted pantograph highlights

- Cantilever arms available in short or long in a large variety of colors to suit any city environment
- WiFi antenna for secure and reliable wireless communication between charging infrastructure and vehicle based on OPPCharge protocol
- LED signal lamp to indicate the availability status of charging infrastructure

Inverted pantograph

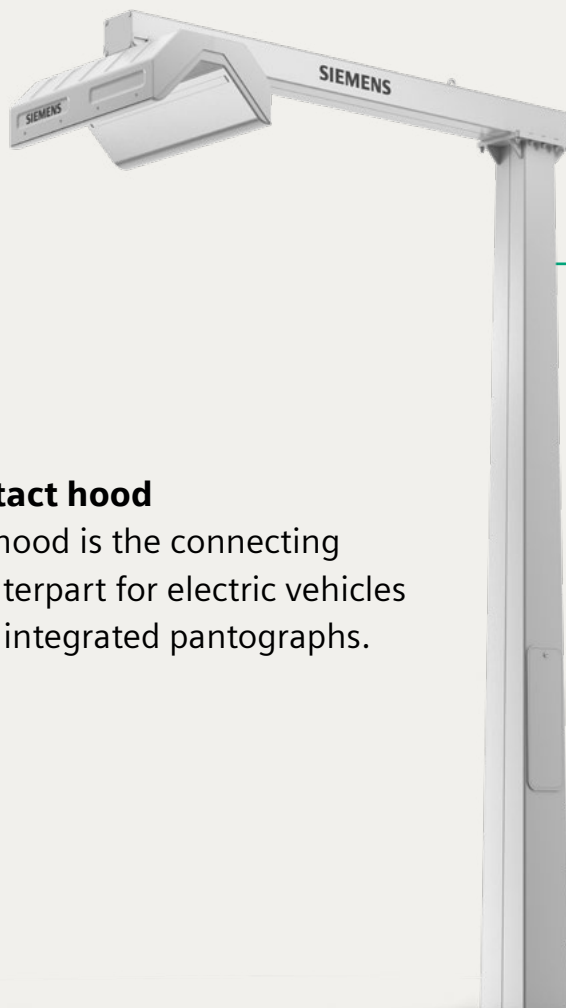
For the eVehicles with the contact rails on the roof the inverted pantograph is the right charging solution.



Optional



One-meter cantilever extension



Contact hood

The hood is the connecting counterpart for electric vehicles with integrated pantographs.

Contact hood highlights

- Cantilever arm
- Connection hood with insulated 4-pole contact
- Lightweight mast and simple architecture that's easy to set up
- Baseplate for safe attachment to the foundation

Optional



Contact hood for the under-ceiling application

Technical data (IEC)



Connection options

Contact hood

Inverted pantograph

DC output

Rated power	kW	500	600
Voltage (range)	V	100 ... 1,000	
Current of connected cables (max.)	A	500	800

Environmental conditions

Operating temperature	°C	-25 ... +45	
Operating altitude	m	≤ 2,000 above sea level (without derating)	
Relative humidity	%	5 ... 95 (non-condensing)	

Mechanical specifications

Enclosure protection		IP54, IK10, outdoor	
Housing material		Powder-coated galvanized steel, painted	
Color		RAL 9006 – White aluminum	
Height, installed	mm	5,765	6,573
Road clearance	mm	1,250 to 1,550 height of the electric vehicle incl. insulators	4,550 to 4,650
Cantilever length	mm	3,510	4,200 or 5,200 (optional)
Approx. distance mast to curb	mm	1,900	1,400
Footprint on sidewalk	mm	350 x 300	1,300 x 315
Pantograph operating range	mm	n.a.	900
Approx. weight acc. to configuration	kg	900	1,870

General specifications

User authentication and payment		n.a.	RFID (optional)
Network connection		Ethernet	
Charging status indication		n.a.	LED

Norms and standards

Connection standards		CCS	OPPCharge
Communication protocol		PLC	WiFi IEEE 802.11a
CE certification		Yes	Yes



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 operation with digital solutions for efficient charging management

Along with the charging equipment, DepotFinity – our best-in-class digital solutions and services – ensures the 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 costs.



Offer a reliable charging operation with cloud-based service packages

Profit from our Care full-scale service packages that are designed to support the reliability of your business throughout the entire lifetime of your charging equipment.

Four reasons to go electric with Siemens

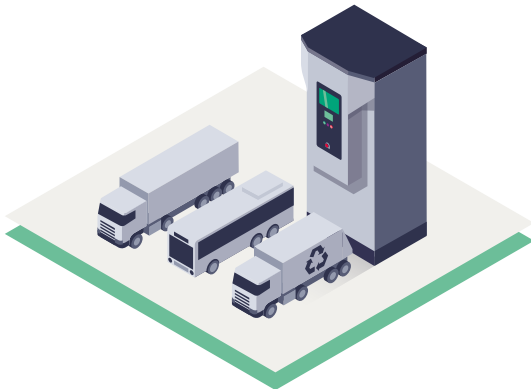
With Siemens, you'll rely on a global partner who knows the challenges of eMobility and offers comprehensive solutions for all charging applications.

Contact our experts



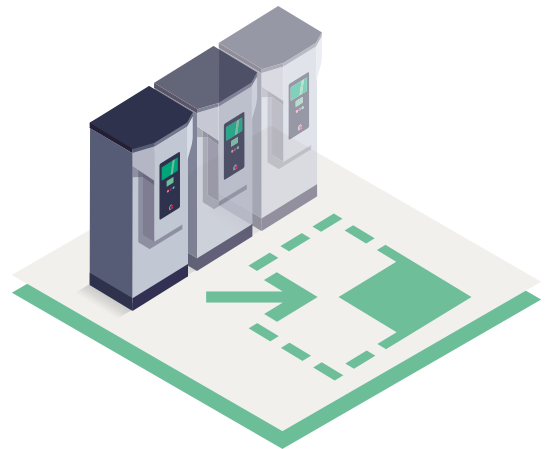
Interoperable, future-proof technology

Up to 1,000 V ensures flexibility in electrifying your fleet – cybersecure for today and tomorrow and ready to be installed in semi-public locations



Flexible, space-saving solutions

Modular for easy integration with multiple vehicle connection options, dimensions optimized by 17%, and flexible positioning



Robust, durable outdoor design

Ensures equipment longevity, easy outdoor use per IP54, and the highest fleet availability



CAPEX and OPEX optimization

To realize the most competitive charging solution and efficiently manage your daily operations with > 96% best-in-class power efficiency and digital solutions



About Siemens eMobility

eMobility is already part of our everyday. And we are committed to anchoring this even more in everybody's daily lives by offering a charging infrastructure that is smart, efficient and innovative – and which makes mobility more sustainable ultimately.

And how do we do this?

By building an ecosystem to tackle the challenges of a complex world together. By cooperating with OEMs, utilities, fleet operators, companies, cities and customers alike – while bringing in the sound knowledge in energy supply, grids, mobility and buildings from a technology company that has been transforming the everyday for a 175 years. By connecting the real and the digital worlds with our IoT-enabled hardware, software solutions and service offerings that help customers and users save time, resources and costs.

And finally, with innovations like wireless or megawatt charging providing solutions for the challenges ahead. Our portfolio is designed for every use case in almost every region of the world – be it at home, at work, at bus stations, or within company depots.

To make a long story short: by electrifying mobility and making it more sustainable, we transform the everyday for a better tomorrow.

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