

**SIEMENS**

*Ingenuity for life*



# SICHARGE UC

Powerful charging solution  
for your electric fleet

[siemens.com/sichargeuc](https://www.siemens.com/sichargeuc)

# The SICHARGE UC family

Powerful and reliable, the SICHARGE UC product family takes care of a diverse mix of electric vehicles with high power demand. It provides you with a technical solution that fits your specific needs and ensures the highest availability of your fleet.

SICHARGE UC with its multiple connection options furnishes you with modular building blocks and freedom to choose between Dispensers and high power automated charging with Pantographs or Hood, thus overcoming space constraints.



**Interoperability and future proof up to 1000 V**  
To ensure flexibility in electrifying your fleet – today & tomorrow



**Robust, durable, outdoor designed**  
To ensure longevity of equipment, easy outdoor usage with IP54 and highest fleet availability



**Flexible and space-saving**  
To easily integrate into existing depot with constraints in HW, SW or layout



**Optimized CAPEX and OPEX**  
To realize the most competitive solution and efficiently manage your daily operation



# High power for your electric fleet

Keeping an electric fleet charged and running efficiently requires the distribution of high power in an intelligent way. The SICHARGE UC product family provides the right technical solutions for your business needs. It depends on the routes, charging schedules and location of electric vehicles when and where charging is most reasonable and efficient.

## Depot charging

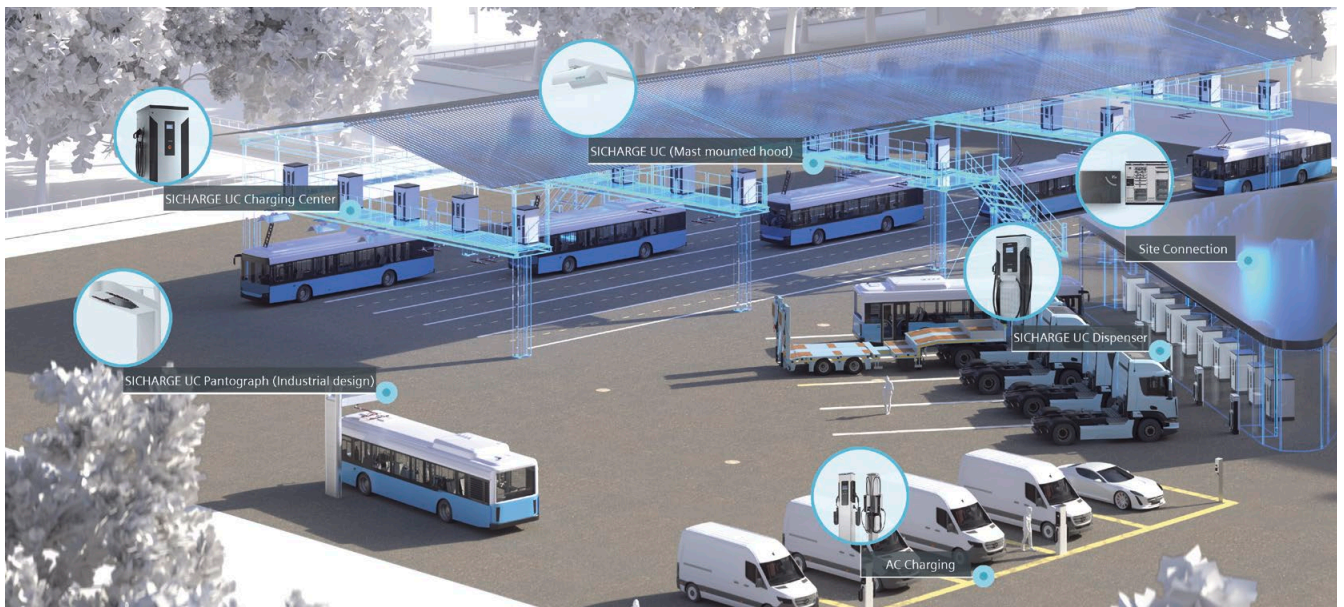
In a central depot, vehicles generally spend some hours during a day or night and can be sequentially charged as per the needs of their schedule.

Charging directly from a SICHARGE UC compact charger or sequentially connected Dispensers is well suited for overnight charging at the depot.

## Opportunity charging

High power automated charging with Pantographs or contact Hoods is the optimal solution for ultra fast charging and shorter charging cycles.

This solution can either be implemented for on-route charging or in the depot when tight schedules need to be considered.



# Charging setup tailored to your needs

Flexible configuration options



## Compact charging

SICHARGE UC 100C or 200C compact charger with integrated cable – simple and direct connection with your eVehicle.



## Sequential charging

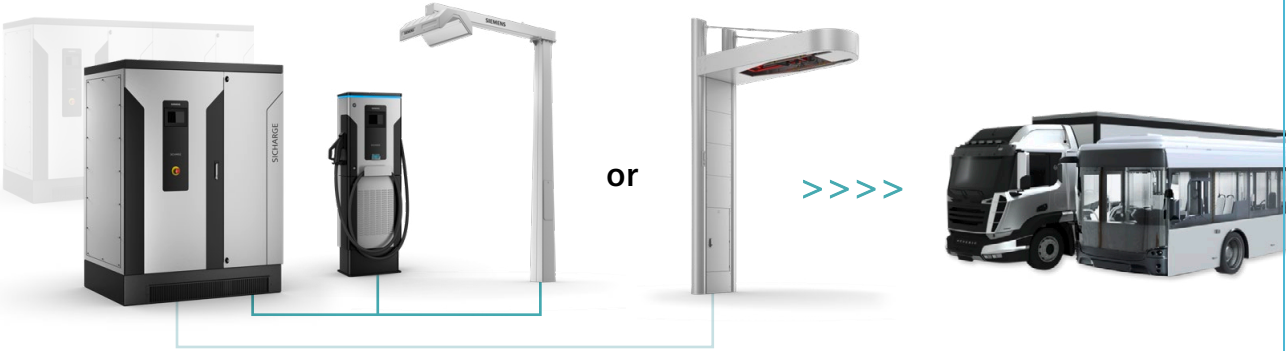
SICHARGE UC 100 to 400 with up to 5 air-cooled or 3 liquid-cooled Dispensers or automated contact Hoods connected sequentially.





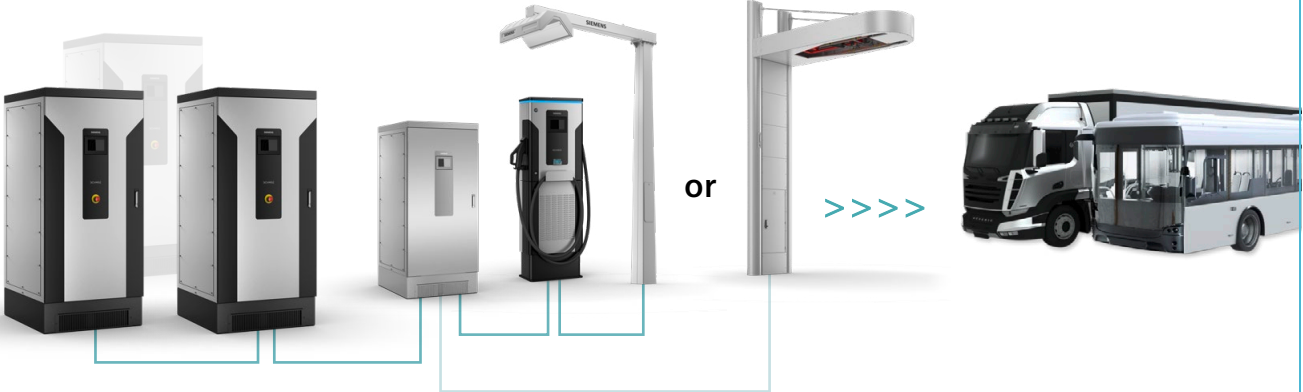
### Ultra high power charging

SICHARGE UC up to 800 kW can be connected to liquid-cooled Dispensers or automated contact Hoods or Pantograph sequentially.



### Implementation of charging flexibility – project specific

The SICHARGE UC family can adopt to your individual needs through flexible combination in a switching matrix.



# State-of-the-art technology

## Charging Center

The Charging Center is the core of your system. It contains the charging controller, the DC converters and optionally a direct cable connection to the vehicle. Several other vehicle connections like the cable based Dispenser, inverted Pantograph and Hood can be powered by this unit.

High degree of protection IP54 against dust and spray water

Covered plug holder (optional)

Cable holder for convenient and clean operation

Power cable with comfortable length for rough environments

Multilingual 7" outdoor touchscreen display at an ergonomic height, accessible and easy to read – also in bright sunlight (optional)

Emergency stop button

C3 painted for outdoor usage

Large doors for easy maintenance access



## Dispenser

The cable connected Dispenser of the UC family is installed close to the vehicles connection with a small footprint and elegant design.

For investment and space optimization, several Dispensers can be powered in sequence by a single Charging Center.

Inclined rain protection Hood directs water to the rear

High degree of protection IP54 against dust and spray water

Covered plug holder (optional)

Multiple options for floor, wall or roof mounting

Cable optionally cooled for up to 400 A

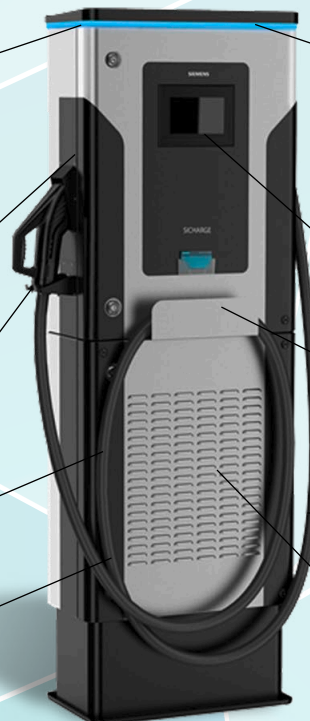
Charging status indication by 360 degree LED light (optional)

Multilingual 7" outdoor touchscreen display at an ergonomic height, accessible and easy to read – also in bright sunlight (optional)

Cable holder for convenient and clean operation

Power cable for application in rough environments with comfortable length

Air ventilation slots for the liquid-cooled cable



## Inverted Pantograph

### MastPanto – industrial design

### MastPanto – urban design

The inverted Pantograph is a fully automated option to connect to the fleet e.g. on feeding opportunities along the route.



## Mast mounted Hood

For electric vehicles with integrated Pantograph, the Hood is the connecting counterpart. The Hood is available in two variants: mounted on a mast or directly under the ceiling.

# Technical data

SICHARGE UC  
Compact charger &  
Charging center



SICHARGE UC  
Charging center



SICHARGE UC  
High power charger



SICHARGE UC	100 C / 100	200 C / 200	400	600	800
<b>Vehicle interface</b>					
Integrated cable	CCS	CCS	-	-	-
Air-cooled CCS cable Dispenser	x	x	-	-	-
Liquid-cooled CCS cable Dispenser	-	-	x	-	-
Mast mounted Hood	x	x	x	x	x
Mast mounted (inverted) Pantograph	-	x	x	x	x
<b>Nominal input</b>					
Voltage, V AC	400 (3ph + PE) ± 10 %				
Current at nominal voltage per phase, A	152	228	456	683	911
Frequency, Hz	50*				
Power factor (cos phi)	> 0.98				
<b>DC output**</b>					
Peak power, kW	125	200	400	600	800
Rated power, kW	100	150	300	450	600
Current (max.), A	125	200	400	600	800
Voltage (range), V DC	10 ... 1000				
Efficiency factor η (at load 100%), %	96 ... 97				
<b>Environmental conditions</b>					
Operating temperature and humidity	-25 ...+45 °C (can be extended upon request) and up to 95% relative humidity (noncondensing)				
Max. operating altitude, m	2000 (without derating)				
<b>Mechanical specifications</b>					
Operational environment	Indoor and outdoor				
Protection enclosure	IP54, IK10 for housing, IK 09 for HMI				
Casing material	Galvanized steel, painted, C3				
Color	Main housing: RAL 9006 – White aluminium; roof and base: RAL 9017 – Traffic black matt				
Overall dimensions W x D x H, mm	746 x 898 x 1800	929 x 1109 x 2000	1526 x 1109 x 2000	3052 x 1109 x 2000	
Approx.weight, kg	1000	1400	2780	4120	5560
<b>General specifications</b>					
Charge control unit	Siemens controller				
Local user interface	7" touchscreen HMI (optional)				
User authentication	RFID (optional)				
Network connection	Ethernet interface / 3G / 4G				
Electric safety device	RCD B-type (optional)				
Communications protocol	OCPP 1.6 (J-SON)				
Cable lengths	3.5 / 6 / 10 m				
Charging standards	EN 61851-1/23/24, ISO 15118 (DIN 70121)***				
EMC standards	EN 55016-2-1 & -3; EN 61000-4-2 & -3 & -4 & -5 & -6				
CE-Certification	Yes				

\*60 Hz upon request

\*\*Details available in the technical manual

\*\*\*Complies with ISO15118-1 standard use-cases, further use-cases being implemented



**SICHARGE UC  
Dispenser**  
Air-cooled Liquid-cooled



**SICHARGE UC  
Mast mounted Hood**



**SICHARGE UC  
Inverted Pantograph**



Connection options	Dispenser		Mast mounted Hood	Inverted Pantograph		
<b>Design variants</b>	<b>Air-cooled cables</b>	<b>Liquid-cooled cables</b>	<b>ID Industrial design</b>	<b>UD Urban design (optional*)</b>	<b>ID Industrial design</b>	<b>ID-E Industrial design-extended</b>
<b>DC output**</b>						
Connection standard	CCS type 2		CCS	OPPCharge		
Peak power, kW	125 / 200	400	800	800		
Rated power, kW	100 / 150	300	600	600		
Current, A	125 / 200	400	500	800		
Voltage (range), V DC	10...1000					
<b>Environmental conditions</b>						
Operating temperature and humidity	-25 ...+45 °C (can be extended upon request) and up to 95% relative humidity (noncondensing)					
Max.operating altitude, m	2000 (without derating)					
<b>Mechanical specifications</b>						
Protection	IP54, IK10 for housing, IK 09 for HMI					
Height, installed, mm	2000 (915 for wall mounting)		5000	5805	6573	6573
Road clearance, mm	n/a		4635	4550 to 4650		
Cantilever length, mm			3500	3955	4200	5200
Approx. distance mast to curb, mm			1900	1400	1400	2400
Footprint on sidewalk, mm	600 x 300		350 x 300	940 x 315	1300 x 330	1300 x 330
Operating range Pantograph, mm	n/a		n/a	900		
Approx. weight, kg	95 (60 for wall mounting)	180	900	1975	1870	2300
Color	Main housing: RAL 9006 – White aluminium; roof and base: RAL 9017 – Traffic black matt		RAL 9006 – White aluminium			
Material	Galvanized powder coated steel		Galvanized steel, painted, min. C3	Galvanized steel with fiber glass panel	Galvanized steel, painted, min. C3	
<b>General specifications</b>						
Communication standard	PLC		PLC	WiFi IEEE 802.11a		
Number of possible connectors (sequential charging)	up to 5		2***	1		
User authentication	RFID (optional)		n/a	RFID (optional)		
Cable lengths, m	3.5 / 6 / 10	3.5 / 5	n/a	n/a		
CE-Certification	Yes					
Network connection	Ethernet interface / 3G / 4G					
Local user interface	7" touchscreen HMI (optional)		n/a	n/a		
Charging status indication	LED (optional)		LED	n/a		

\* Upon a project-specific request

\*\* Details available in the technical manual

\*\*\* eVehicle under the Mast Hood will be given priority in charging sequence

# More than charging



## Experience peace of mind

We offer you world-class services and support throughout the entire lifecycle of your charging equipment, thus assuring the maximum uptime and highest availability of your chargers.



## Service packages

Our cloud-based service packages Care and Care Plus look after your chargers using the dedicated Siemens service backend.

### Care

The basic Care package is included during the warranty period and can be extended by subscription.

It ensures that firmware updates keep your chargers up to date as eMobility continues to evolve. Remote analyses and diagnostics are performed by our support center on demand.

### Care Plus

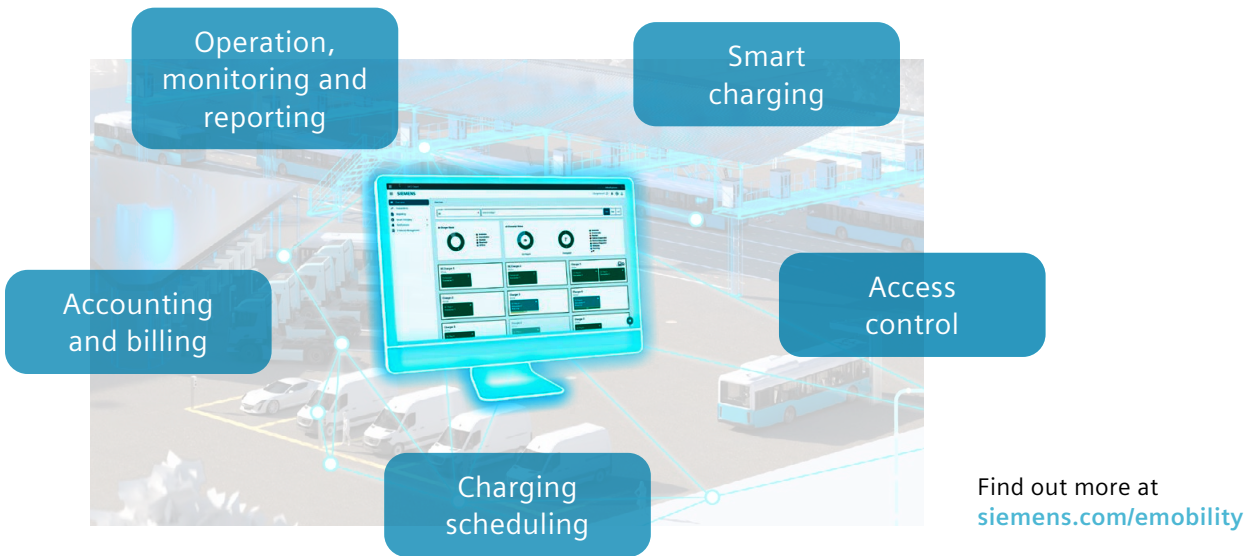
Enjoy all Care digital services and even more with our Care Plus package. Your charger will be proactively monitored and analyzed by our operation center. Firmware updates will be delivered with priority.

# Managing charging of your fleet



## Benefit from Siemens digital solutions

Together with the charging equipment, our best-in-class software services ensure smooth, reliable and efficient operation of your electric fleet.



# From planning to operation



## Superior support throughout the lifecycle



**Intelligent planning:** we support your depot electrification starting from the expert consultancy and depot planning including the charging simulation.



**Smart infrastructure:** benefit from our comprehensive charging portfolio which includes DC and AC equipment as well as advanced solutions for the power connection of your site.



**Managing the operations:** Siemens software suite offers everything you need to manage charging of your electric fleet intelligently and efficiently.



**Rely on us – we care:** during the whole lifecycle our cloud-based service packages Care and Care Plus look after your chargers to ensure highest availability of your fleet.

Siemens AG  
Smart Infrastructure  
Distribution Systems

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