SICHARGE UC™

Modular charging system

SICHARGE UC offers 150 kW (or up to 600 kW) of flexible charging solutions for buses, trucks, and heavy-duty vehicles, whether charging at a depot or en route.

- Fast, secure charging
- Design flexibility
- Sleek, compact dispenser size
- Easily upgradeable
- Low installation costs with one power cable needed
- Customizable: Connect up to four cabinets together to achieve 600kW of power
- Compatible with the Combined Charging System (CCS) charging standard and OCPP compliant.
- Interoperability

Designed with flexibility in mind

SICHARGE's sleek, compact design fits into a variety of configurations making the best use of limited space. Each SICHARGE UC cabinet can power up to four charging dispensers with easy installation. With SICHARGE UC you can combine power cabinets to achieve up to 600 kW of DC power. AC incoming and DC outgoing cabinets dramatically reduces the installation cost. This feature reduces infrastructure costs by limiting the number of AC input feeds required for multiple cabinets.

Optimize your SICHARGE UC charging with sequential charging and easily manage your sequential charging with Siemens cloud-based services.

Choosing the right set up for you

Whether needing plug-in charging, en route charging, or overhead charging, SICHARGE UC offers a variety of charging configuration options to choose from.

SIEMENS

Charging setup tailored to your needs

Flexible configuration options

Sequential charging

SICHARGE UC connects up to four J3105 pantographs, or CCS1 dispensers and allows for dynamic sequential charging.

Ultra-high-power charging

SICHARGE UC can be connected to liquid cooled dispensers with up to 500A or J3105 compatible pantograph connections with up to 800A.

Implementation of charging flexibility – project specific

The SICHARGE UC family can adapt to your individual needs using a flexible combination of switching matrix power.

Beyond the chargers

A variety of cloud service packages designed to effectively manage your depot and eFleet are available to help you best manage your charging infrastructure. Our solutions combined with our ecosystem of partners offers remote diagnostics to detailed reporting and operational planning and scheduling with one, simple user interface.

Siemens offers PlugtoGrid™, an end-to-end set of solutions for EV charging infrastructure. Easily connect your chargers to the grid with Siemens' eMobility open protocol technology and electrical power distribution solutions, as well as flexible options like energy storage, renewable power integration, and managed cloud services.

Technical data

	SICHARGE UC Charging center	SICHARGE UC Charging center and combiner cabinet	SICHARGE UC High-power charger
			

SICHARGE UC	200	400	600	800
Vehicle interface				
Air-cooled CCS cable Dispenser	×	-	-	-
Liquid-cooled CCS cable Dispenser	-	×	×	-
Mast mounted (inverted) Pantograph	×	×	×	×
Nominal input				
Voltage	480 and 600 V AC (3ph + PE) ± 10 %			
Frequency, Hz	60			
Power factor (cos phi)	> 0.98			
DC output*				
Rated power, kW	150	300	450	600
Current (cont.), A	200	400	600	800
Voltage (range), V DC	10 … 950			
Efficiency factor η (at load 100%)	96% … 97%			
Environmental conditions				
Operating temperature	-25°C to +45°C			
Mechanical specifications				
Operational environment	Indoor and outdoor			
Protection enclosure	NEMA 3R, IK10 for housing			
Casing material	Galvanized steel, painted, C3			
Colour	Main housing: RAL 9006 – White aluminium; roof and base: RAL 9017 – Traffic black matt			
Overall dimensions W × D × H (cm) without combiner cabinets (in side-by-side arrangement)	109 × 99 × 220	220 × 99 × 220	330 × 99 × 220	439 × 99 × 220
Approx. weight (kg) without combiner cabinets	1,500	3,000	4,500	6,000
General specifications				
Charge control unit	Siemens SIMATIC S7			
User authentication	RFID (optional)			
Network connection	Ethernet interface / 3G / 4G / WLAN			
Electric safety device	RCD B-type (optional)			
Communications protocol	OCPP 1.6 (J-SON)			
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			
Compliance	UL2202; UL2231			

* 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
Inverted Pantograph

Connection options	Dispenser		Inverted Pantograph		
Design variants	**Air-cooled cables**	**Liquid-cooled cables**	**UD Urban design**	**ID Industrial design**	**ID-E Industrial design-extended**
DC output*					
Connection standard	CCS type 1		OPPCharge		
Rated power, kW	150	300	600		
Current, A	200	500	800		
Voltage (range), V DC	10...950				
Environmental conditions					
Operating temperature	-25°C to +45°C				
Mechanical specifications					
Protection	NEMA 3R, IK10 for housing				
Height, installed (cm)	200 (91 for wall mounting)		581	658	658
Road clearance (cm)	n/a		455 to 465		
Cantilever length (cm)			396	419	520
Approx. distance mast to curb (cm)			140	140	241
Footprint on sidewalk (cm)	60 × 30		94 × 30	129 × 33	129 × 33
Operating range Pantograph (cm)	n/a		89		
Approx. weight, (kg)	95 (60 for wall mounting)	180	1,975	1,870	2,300
Colour	Main housing: RAL 9006 – White aluminium; roof and base: RAL 9017 – Traffic black matt				
Material	Galvanized powder coated steel		Galvanized steel with fiber glass panel	Galvanized steel, painted, min. C3	
General specifications					
Communication standard	PLC		WiFi IEEE 802.11a		
Number of possible connectors (sequential charging)	up to 4		4		
User authentication	RFID (optional)		RFID (optional)		
Cable lengths (m)	7.5	5	n/a		
Compliance	cUL				
Network connection	Ethernet interface / 3G / 4G / WLAN				
Local user interface	7" touchscreen HMI		n/a		
Charging status indication	LED		LED		

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

Published by
Siemens Canada Limited 2021

Siemens Canada Limited
1577 North Service Road East
Oakville, ON L6H0H6

Customer Interaction Centre
Tel: 1 (888) 303-3353
cic.ca@siemens.com

Printed in Canada

siemens.ca/sichargeuc