

MCS Charge Post + Power Cabinets



Electrifying Logistics with Megawatt Power



Performance
Benchmark

1.2 MW

3 x 400 kW Cabinets

Maximum
Power Delivery

1500 A

Continuous Output

Reliable Energy
Delivery

+99%

Success Rate*

*Operational target

Power Specification

DC Output:	<p>Output power configurations: 1200 kW, 800 kW, 400 kW MCS output current: up to 1500 A (continuous at 35°C / 95°F) CCS output current: up to 600 A</p> <p>Output voltage: 400 - 980 V Power conversion efficiency: up to 97% Number of outlets: MCS single outlet, optional CCS outlet</p>
AC Input:	<p>Nominal voltage: (CE): 400 V (NA): 480 V Nominal input current (RMS): (CE): 616 A (NA): 513 A AC power rating: 419 kW Frequency: (CE): 50 Hz (NA): 60 Hz Earthing systems: (CE): TN-S, TN-CS (NA): WYE</p> <p>Inlet cable size: 3 ph + PE (no neutral) up to 3 x 300mm² per phase Power factor: > 0.99 at full load Total Harmonic Distortion (THD): ≤ 5% Overvoltage category: III SPD: Type 1 + 2 SCCR: 65 kA</p>

System Specification

Operating Conditions:	<p>Operating from -30°C to 55°C (-22°F to 122°F) with derating Storage from 5°C to 40°C (41°F to 104°F), IEC 60721-3-2 Altitude: up to 2000 m (6562 ft) Humidity: up to 95%, non-condensing</p> <p>Impact resistance: IK10 IP rating: IP54, indoor and outdoor Single cabinet noise emission: 65 dB(A) avg. within 1 m radius, at 25°C (77°F), full power Mounting options: floor mounted</p>
Form Factor:	<p>Dimensions of charger body (H x W D): MCS Charge Post: 1950 x 1180 x 500 mm (76.8 x 46.5 x 19.7 in) MCS Power Cabinet: 2165 x 810 x 790 mm (85.2 x 31.9 x 31.1 in)</p> <p>Weight: MCS Charge Post: 550 kg (1212 lbs) MCS Power Cabinet: 730 kg (1609 lbs) Accessibility: meets ADA requirements for height, reach, and UI Corrosion resistance: C4, ISO 12944</p>

Electrical Connection

Cabinet - Charge Post:	<p>DC Power Cable, per cabinet (up to): 2 x 300 mm² DC +, 2 x 300 mm² DC - Auxiliary AC Supply: 3 x 400/480 Vac; 3 x 2.5 mm² Interlock Cables: 2 wire STP (shielded twisted pair) Distance: 60 m (197 ft) (test for longer distances pending) Communication: CAN over Ethernet</p>
-------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Customer Interface

Display:	Type: 21.5" HD full-color anti-glare LCD; Brightness: 1300 nits Contrast: 5000:1; Interface: Touchscreen
HMI Configuration:	Info modules: pricing, payment method, help content, idle state info Branding modules: brand color and logo, app QR code, outro screen
Languages:	English, French, Spanish, German, Italian, Norwegian, Dutch
Connector Options:	MCS, additional CCS
MCS Cable:	Length: 2.4 m (7.9 ft); Reach: 1.5 m (4.9 ft); Type: liquid-cooled
Lighting:	Roof: 360° RGBW LED strip; Gun holder: RGBW LEDs
Authentication Methods:	RFID, credit/debit card, mobile app
RFID System:	Mifare ISO 14443 A/B to part 4 and ISO 15693, ISO 18092/ECMA-340 (NFC). Others available on request.
Emergency Button:	Can be connected to external EMG button
Service Access:	MCS Charge Post: front doors (double door), rear air filter panel MCS Power Cabinet: front and rear doors
Remote Management:	Access control, configuration, diagnostics, software updates ¹

Standards & Compliance

Safety Standards:	(CE): IEC 61851-23-3 Megawatt Charging System (NA): SAE J3271 Megawatt Charging System
Metering:	(CE): MID, Eichrecht (NA): NIST
EMC:	(CE): IEC 61851-21-2, IEC 61000-6-4, IEC 61000-6-2 (NA): FCC part 15, IEEE 519 (Class A)
Manufactured:	Europe
Network Connections:	3G/4G/5G, Ethernet (10/100 Base-T)
OCPP:	Open Charge Point Protocol (OCPP) 1.6J and 2.0.1
Vehicle Communication Protocol:	ISO 15118-20 over 10BaseT1S Ethernet as per MCS standard
RED Directive:	EN 300 330 V2.1.1 2017, EN 50364: 2018 (RFID), EN 301 908-13 V.13.2.1 2022, IEC 62311: 2019, EN IEC 62311: 2020 (4G test)
Additional Standards:	IEC 63379 MCS connector (expected Q4 25)
Expected Lifespan:	10 years ²

¹ Subject to Service Package coverage

² Subject to Service Package coverage, potential refurbishment, and environmental operating conditions including proximity to sea water, conductive dust, and condensing humidity

—
©Copyright ABB E-mobility 2025. All rights reserved to copyrights, registered trademarks, and trademarks reside with their respective owners. The information in this document is provided in good faith, is provided for information purposes only and is subject to contract. The information contained herein is subject to change without notice and should not be construed as any commitment by ABB E-mobility B.V. or its affiliates or holding companies (ABB E-mobility). ABB E-mobility assumes no responsibility for any errors that may appear in this document. We reserve all rights with respect to this document, its content and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB E-mobility. No representations are made, express or implied, with respect to the accuracy, reliability, availability or completeness of the information provided, and no liability is accepted for any damage or loss suffered as a result of reliance on any information provided herein.

—
ABB E-mobility B.V.

Heertjeslaan 6
2629 JG Delft
The Netherlands
Phone: +31 88 4404600
E-mail: info.evci@nl.abb.com
e-mobility.abb.com

—
ABB E-mobility Inc.

4601 Park Rd, Suite 600
Charlotte, NC 28209
United States
Phone: 1-706-344-2889
E-mail: US-evci@abb.com
e-mobility.abb.com

—
ABB E-mobility Inc.

800 Hymus Boulevard
Saint-Laurent, QC H4S 0B5
Canada
Phone: 1-800-435-7365
E-mail: CA-evci@abb.com
e-mobility.abb.com