

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

<b>DC Output:</b>	<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>
<b>AC Input:</b>	<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-C, TN-CS (NA): WYE</p> <p>Inlet cable size: 3 ph + PE (no neutral) up to 3 x 300mm<sup>2</sup> per phase  Power factor: &gt; 0.99 at full load  Total Harmonic Distortion (THD): ≤ 5%  Overvoltage category: III  SPD: Type 1 + 2  SCCR: 65 kA</p>

# System Specification

<b>Operating Conditions:</b>	<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>
<b>Form Factor:</b>	<p>Dimensions of charger body (H x W D):  <b>MCS Charge Post:</b> 1950 x 1180 x 500 mm (76.8 x 46.5 x 19.7 in)  <b>MCS Power Cabinet:</b> 2165 x 810 x 790 mm (85.2 x 31.9 x 31.1 in)</p> <p>Weight: <b>MCS Charge Post:</b> 550 kg (1212 lbs)  <b>MCS Power Cabinet:</b> 730 kg (1609 lbs)  Accessibility: meets ADA requirements for height, reach, and UI  Corrosion resistance: C4, ISO 12944</p>

# Electrical Connection

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

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

# Standards & Compliance

<b>Safety Standards:</b>	(CE): IEC 61851-23-3 Megawatt Charging System (NA): SAE J3271 Megawatt Charging System
<b>Metering:</b>	(CE): MID, Eichrecht (NA): NIST
<b>EMC:</b>	(CE): IEC 61851-21-2, IEC 61000-6-4, IEC 61000-6-2 (NA): FCC part 15, IEEE 519 (Class A)
<b>Manufactured:</b>	Europe
<b>Network Connections:</b>	3G/4G/5G, Ethernet (10/100 Base-T)
<b>OCPP:</b>	Open Charge Point Protocol (OCPP) 1.6J and 2.0.1
<b>Vehicle Communication Protocol:</b>	ISO 15118-20 over 10BaseT1S Ethernet as per MCS standard
<b>RED Directive:</b>	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)
<b>Additional Standards:</b>	IEC 63379 MCS connector (expected Q2 25)
<b>Expected Lifespan:</b>	10 years <sup>2</sup>

<sup>1</sup> Subject to Service Package coverage

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

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