

C50

Built to Power Places



Optimized for
1h Dwell Time

50 kW
Output Power

Branded
Experiences

21.5" HD
Interactive Display

Fully Managed
& Operated

+99%
Success Rate*

*Operational target

Power Specification

DC Output:	<p>Output power: 50 kW Dynamic Power Sharing: 25 kW power granularity</p> <p>Output voltage: 150 - 980 V Output current (continuous): 150 A</p> <p>Number of outlets: dual outlet Power conversion efficiency: up to 96.5% Standby power: 100 W</p>
AC Input:	<p>Nominal voltage: (CE): 400 Vac ($\pm 10\%$) (NA): 480 Vac ($\pm 10\%$) Nominal input current (RMS): (CE): 77 A (NA): 64 A</p> <p>Frequency: (CE): 50 Hz ($\pm 10\%$) (NA): 60 Hz ($\pm 10\%$) Earthing systems: (CE): TN-C, TN-C-S, TN-S, TT (NA): WYE Inlet cable size per phase (no neutral): multi core cable, max. 28 mm (1.1 in) outer diameter Power factor: > 0.99 at full load</p> <p>Total Harmonic Distortion (THD): < 3% Overvoltage category: III SPD: (CE): Type 1 + 2 (NA): Type 1 SCCR: (CE): 50 kA (NA): 65 kA</p>

Customer Interface

Display:	Type: 21.5" HD full color anti-glare LCD; Brightness: 1300 nits; Contrast: 1000:1; 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:	CCS1/2 air-cooled; NACS (J3400) air-cooled
Cable Management System (CMS):	Integrated linear force balancer CMS
Cable Options:	Length: 4.2 m (13.8 ft); Reach: 3.9 m (12.8 ft) Length: 7 m (22.9 ft); Reach: 6.7 m (22.0 ft) Type: Air-cooled
Lighting:	Roof: 360° dual RGBW LED strips; Gun holder: RGBW LEDs
Authentication Methods:	RFID, Autocharge, Plug & Charge, 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 (Calypso, Ultralight, PayPass, HID, and more)
Remote Management:	Access control, configuration, diagnostics, software updates ¹

System Specification

Operating Conditions:	<p>Operating from -30°C to 55°C (-22°F to 131°F) with derating Storage from 5°C to 40°C (41°F to 104°F), IEC 60721-3-2 Altitude: 2500 m (8202 ft) Humidity: up to 95%, non-condensing</p> <p>Impact resistance: IK10 IP rating: IP54, NEMA 3R, indoor and outdoor rated</p> <p>Noise emission: 55 dB(A) average within 1 m radius, at 25°C (77°F), full power Intended use: indoor and outdoor Mounting options: floor mounted Environment pollution degree: Class 3</p>
------------------------------	--

Form Factor:	<p>Dimensions of charger body (H x W x D): 1967 x 653 x 235 mm (77.4 x 25.7 x 9.3 in) Weight: 175 kg (385 lbs)</p> <p>Accessibility: meets ADA requirements for height, reach, and user interface</p> <p>Enclosure type: high-durability aluminum body Corrosion resistance: C5-H, ISO 12944</p>
---------------------	--

Standards & Compliance

Safety Standards:	<p>(CE): IEC 61851-1, IEC 61851-23 (NA): UL 2202, UL 2231-1, UL 2231-2, CSA 22.2 No.346:22</p>
Metering:	(CE): Eichrecht ² , MID, LNE (NA): CTEP/NTEP
EMC:	(CE): IEC 61851-21-2 (NA): FCC 47 CFR Part 15B (Class A)
Manufactured:	USA & Europe
Network Connections:	3G/4G/5G, Ethernet (10/100 Base-T), single modem
OCPP:	Open Charge Point Protocol (OCPP) 1.6J and 2.0.1
Vehicle Communication Protocol:	DIN SPEC 70121, ISO 15118-2, ISO 15118-3, Autocharge, Plug & Charge
RED Directive:	ETSI EN 300 330, ETSI EN 301 489-1, ETSI EN 301 489-3, ETSI EN 301 489-52, ETSI EN 301 908-1, ETSI EN 301 908-2, ETSI EN 301 908-13, EN IEC 62311: 2020
Sustainability:	ENERGY STAR
Additional Standards:	DC Vehicle connector compliant with IEC 62196-1, IEC 62196-3, Cabinet IP rating according to IEC 60529
Expected Lifespan:	10 years ³

¹ Subject to Service Package coverage

² Only for 4.2 m (13.8 ft) cable variant

³ 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 2026. 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