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:	Output power: 50 kW Output current: 150 A Dynamic Power Sharing: 25 kW power granularity Output voltage: 150 - 980 V Number of outlets: dual outlet Power conversion efficiency: up to 96.5% Standby power: 100 W
AC Input:	Nominal voltage: (CE): 400 Vac (± 10%) (NA): 480 Vac (± 10%) Nominal input current (RMS): (CE): 77 A (NA): 64 A Frequency: (CE): 50 Hz (± 10%) (NA): 60 Hz (± 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 Total Harmonic Distortion (THD): < 3% Overvoltage category: III SPD: (CE): Type 1 + 2 (NA): Type 1 SCBR: (CE): 50 kA (NA): 65 kA

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, Swedish, Danish, 7+ languages coming
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:	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 Impact resistance: IK10 IP rating: IP54, NEMA 3R, indoor and outdoor rated 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
Form Factor:	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) Accessibility: meets ADA requirements for height, reach, and user interface Enclosure type: high-durability aluminum body Corrosion resistance: C5-H, ISO 12944

Standards & Compliance

Safety Standards:	(CE): IEC 61851-1, IEC 61851-23 (NA): UL 2202, UL 2231-1, UL 2231-2, CSA 22.2 No.346:22
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), optional second modem
OCPP:	Open Charge Point Protocol (OCPP) 1.6J and 2.0.1
Vehicle Communication Protocol:	DIN SPEC 70121, ISO 15118-2, ISO 15118-20 (applicable use cases), 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

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