

Electric Vehicle Infrastructure

DC wallbox UL



The ABB DC wallbox is a compact 24 kW DC fast charger with one or two outlets supporting CCS and CHAdeMO protocols.

Operating the wallbox is easy thanks to a 7" full color, daylight readable touchscreen display. This includes starting and stopping of charge sessions, progress indication during charging, help menus, language selection, and PIN code access control.

As connectivity is the key to successful EV charging installations, ABB's DC wallbox features ABB Ability Connected Services to enable authentication, payment, monitoring, remote diagnostics and repair, as well as over-the-air updates and upgrades.

Applications

- Office, workplace
- Hotel and hospitality
- Parking structures
- Dealerships
- Urban fleets
- Public or private campus
- Multi-family residential
- High voltage fleet applications
- Sites with sensitive load concerns

The UL certified ABB DC wallbox is a compact 24 kW DC fast charger perfect for offices, parking facilities, shopping areas and car dealerships.

With its low-power and high-voltage configuration, the DC wallbox can be installed at sites with defined or limited available power service, all while serving today's and future BEVs.

Benefits of low power DC solutions

Low power DC makes sense for applications that demand shorter charging times and higher charging asset utilization than AC solutions can provide, while finding balance with moderated load demands and installation costs.

Where charging power with AC equipment is often limited by the onboard converter of the EV, usually rated 3 to 11 kW, any additional power the AC charging station could provide, remains unused. With the DC wallbox, 24 kW peak DC power is provided directly to the battery, bypassing the limitations of an EV's onboard converter.

High voltage charging capabilities

As electric vehicles and their use cases diversify, high voltage DC charging has become more important to increase charging power while ensuring as much efficiency, safety and usability in DC charging systems. ABB's DC wallbox can meet up to 920V DC fast capabilities to enhance power output across a wider range of today's and tomorrow's EVs, including both passenger and fleet vehicles.

Main features

- 24 kW peak, 22.5 kW continuous fast charging
- 60 A high output current
- Future proof due to DC output voltage range from 150 to 920 V_{DC} supporting all EVs today, and in the future
- Single or dual outlet: CCS and CHAdeMO
- Daylight readable 7" full color touchscreen display
- Future proof connectivity:
 - OCPP 1.6
 - Capability for remote services
- Compact design
- Robust all-weather enclosure for indoor and outdoor use
- RFID reader

Key optional features

- On-screen PIN code authorization
- Input current limiting software to match site requirements
- Web tools for statistics, configuration, access management, remote diagnostics and repair
- Integration with back offices and payment platforms
- Customized branding possibilities

Configurations

The DC wallbox is available in the following configurations:

- Single outlet CCS-1
- Dual outlet CCS-1 + CHAdeMO

General specifications

DC output power	24 kW peak - 22.5 kW continuous
DC output voltage	150 - 920 V _{DC}
DC output current	60 A
User interface	7" full color touchscreen display
RFID system	ISO/IEC14443A/B, ISO/IEC15693, NFC reader mode, Mifare, Calypso
Network connection	GSM / 3G modem 10/100 Base-T Ethernet
Communication	OCPP 1.6 enabled
Environment	Indoor / outdoor
Operating temperature	-35 °C to +55 °C (de-rating characteristic applies)
Protection	IP54, indoor and outdoor
Dimensions (H x W x D)	770 x 584 x 300 mm 30.3 x 23 x 11.8 in
Charge cable	cable lengths 3.5 or 7 m (12' and 23')
Weight	60kg / 132 lbs excluding backplate (10 kg / 22 lbs) and cables
Charging protocols	CCS-1 CHAdeMO
AC Input power connection	Single phase: L1, N, PE Split phase: L1, L2, PE
Input voltage range	200 - 240 V _{AC} +/-10% (60 Hz)
Max. rated input current	100 A Current limiting options available
Efficiency	94% at nominal output power
Compliance and safety	UL, FCC



ABB Inc.

4050 E. Cotton Center Blvd
Phoenix, AZ 85040
United States
Phone: 800-435-7365
E-mail: US-evci@us.abb.com

ABB Inc.

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

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