

Product brochure

EV Charging Infrastructure ABB global charging portfolio

ABB is global leader in EV charging

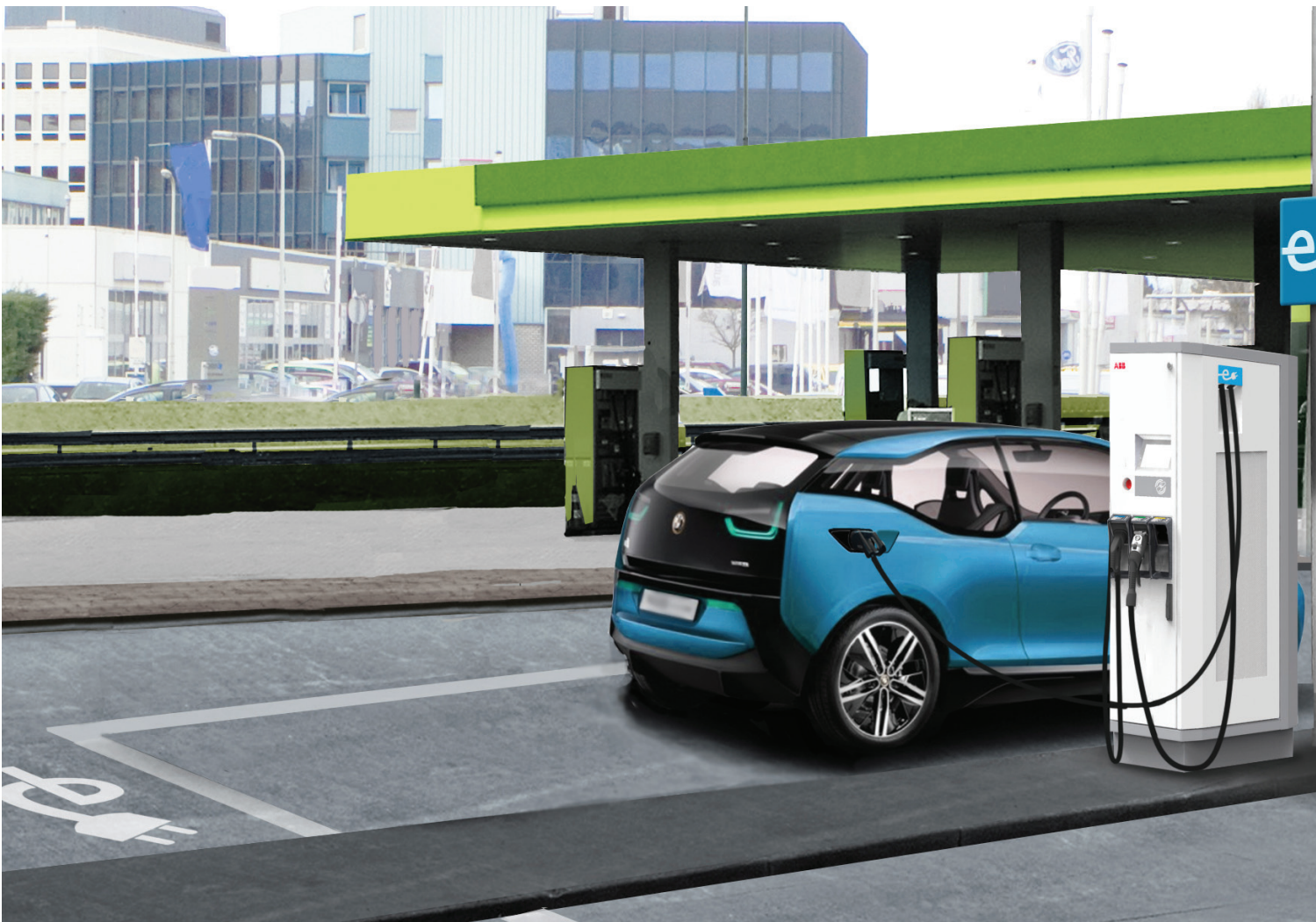
Supporting all EV charging standards

ABB is leading with Internet-connected charging infrastructure, supporting all EV charging standards. ABB offers a total solution: specific charging solutions for any location type and connected services to enhance your business. The chargers easily connect to any service or payment application.

Main features of all ABB chargers

All ABB chargers are created with durability, reliability and maintainability in mind. This results in high-quality products that are future-proof. Main advantages of ABB chargers are:

- **Modular construction** to ensure continued operation.
- **Industry-grade components** to ensure long lifetime and robust operation.
- **Upgradable and future-proof.**
- **Remote maintenance and support** for an effective and timely response to any irregularity in the network.
- **Supporting all open charging standards** globally.
- **Stainless steel cabinet** for durability, even in salty climates.
- **User centered design** validated by user tests.



Key advantages of Internet connected chargers

ABB's Internet connected chargers enable fast global service and pro-active maintenance. ABB Connected services offer 4 key advantages:

- **Flexibility** to connect to any charging network, back-office, payment platform or energy management solution.
- **Upgradability** to benefit from the latest industry standards.
- **High availability** of the service, high uptime guaranteed.
- **Cost efficiency** by avoiding development and maintenance costs of proprietary software solutions.

The advantage of an experienced global player

ABB is a global leader in power and automation technologies. Based in Zurich, Switzerland, the company employs 145,000 people and operates in approximately 100 countries.

ABB has years of experience in creating, installing and maintaining charging infrastructure, including several

nationwide charger networks. As a customer, you profit from ABB's global service organizations, ready to respond timely and efficiently with locally available service engineers.

Supporting all EV charging standards

ABB supports all currently available open charging standards, which enables charging services to widely available electric cars. Product categories are highway and en route chargers, chargers for EV dealers and commercial locations, and DC wallboxes, specifically customized for car OEMs. All chargers can be combined with comprehensive solutions for user authorization, payment and network connectivity.

Product overview

ABB offers fast charging for all kinds of locations and applications. The table below shows an overview of all products.

Products	Applications
Terra 53 series	Highway and en route
Terra 23 series	EV dealers and commercial locations
Custom DC wallbox	Car OEM product, combined sales with car

Connected services	Type of charger network
Driver Care module	Small and large, public
Operator Pro module	Small, closed community
Payment module	Small, public
Ocpp API	Large, public
Real-time status API	Large, public
Support API	Large, public
Home charger API	DC Wallbox network

ABB Charger Care

Diverse types of SLAs available



Infrastructure products

Terra 53 series

Terra 53 is ideal for use at highway rest stops, petrol stations and busy urban areas.

Key specifications

- 50 kW DC fast charger supporting CCS, CHAdeMO, GB/T
- 43 kW AC cable output or 22 kW AC socket output
- European, US and China version available

For the complete list of specifications, features and options, please refer to the Terra 53 product leaflet.

Possible configurations

The Terra 53 is available in several configurations. Optional input power limiting software is available to avoid expensive grid upgrades.

Name	Outputs	Availability	Grid connection
C	CCS	EU	80 A, 55 kVA
C	CCS	USA	75 A, 60 kVA
CJ	CCS, CHAdeMO	EU	80 A, 55 kVA
CJ	CCS, CHAdeMO	USA	75 A, 60 kVA
CT	CCS, AC socket	EU	112 A, 77 kVA
CJG	CCS, CHAdeMO, AC cable	EU	143 A, 98 kVA
Z	GB/T	China	80 A, 54 kVA

Outlet specifications Europe	C	J	G	T
Charging standard	CCS	CHAdeMO	Type 2 cable	Type 2 socket
Maximum output power	50 kW	50 kW	43 kW	22 kW
Output voltage range	50 - 500 V _{DC}	50 - 500 V _{DC}	400 V +/- 10%	400 V +/- 10%
Maximum output current	125 A _{DC}	125 A _{DC}	63 A	32 A



Possible configurations (from left to right): Terra 53 C (EU), Terra 53 CT, Terra 53 CJ (EU), Terra 53 CJG, Terra 53 Z, Terra C (US), Terra CJ (US)

Infrastructure products

Terra 23 series

Terra 23 is ideal for use at car dealerships, offices, commercial parking locations and company car parking.

Key specifications

- 20 kW DC fast charger supporting CCS, CHAdeMO
- 22 kW AC socket output

For the complete list of specifications, features and options, please refer to the Terra 23 product leaflet.

Possible configurations

The Terra 23 is available in several configurations. Optional input power limiting software is available to avoid expensive grid upgrades.

Name	Outputs	Availability	Grid connection
C	CCS	EU	32 A, 23 kVA
CJ	CCS, CHAdeMO	EU	32 A, 23 kVA
CT	CCS, AC socket	EU	63 A, 45 kVA
CJG	CCS, CHAdeMO, AC cable	EU	63 A, 45 kVA

Outlet specifications Europe	C	J	G	T
Charging standard	CCS	CHAdeMO	Type 2 cable	Type 2 socket
Maximum output power	20 kW	20 kW	22 kW	22 kW
Output voltage range	50 - 500 V _{DC}	50 - 500 V _{DC}	400 V +/- 10%	400 V +/- 10%
Maximum output current	60 A _{DC}	60 A _{DC}	32 A	32 A



Possible configurations (from left to right): Terra 23 C, Terra 23 CT, Terra 23 CJ, Terra 23 CJG

Customizable high volume OEM products

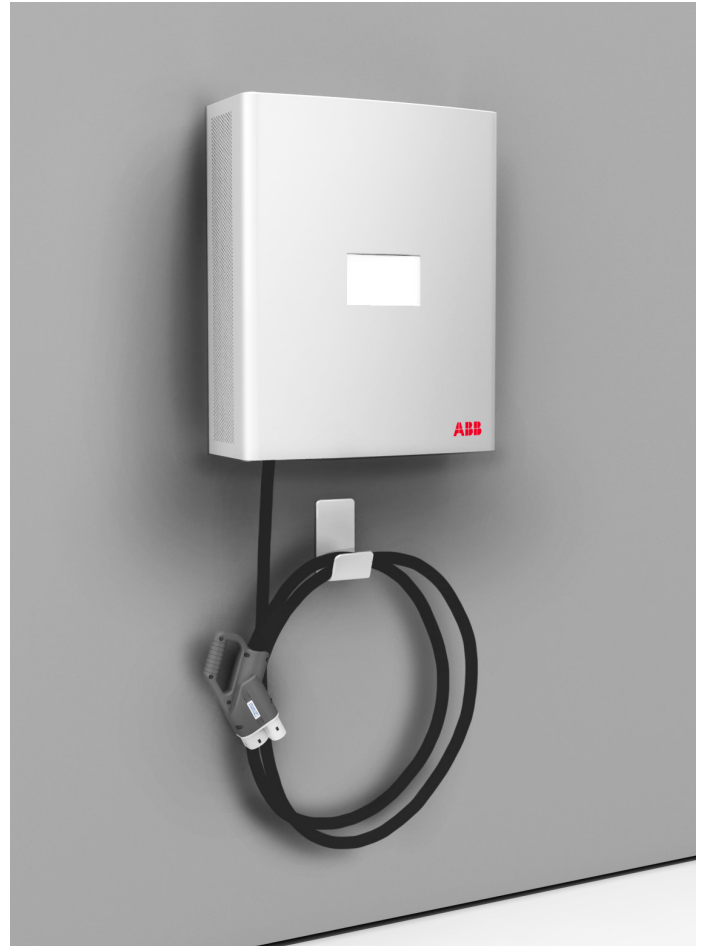
Generic DC wallbox

The ABB DC wallbox enables DC charging at home and at car dealerships. It is typically sold with a vehicle and is only available as a high volume OEM solution.

The DC wallbox is available in 10 kW and 20 kW CCS, CHAdeMO and GB/T variants. The enclosure and HMI can be customized to create a unique look and feel.

The full color touch screen provides clear information on the progress of a charging session. Charging can be started overnight using the timer feature. To avoid unintended use, the charger can be protected with a PIN code.

The DC wallbox can be controlled via a customer designed smart phone app, as it is connected to the Internet. The Internet connection also enables remote updates and service.



Key specifications

- 10 or 20 kW DC fast charger
- Supports either CCS or CHAdeMO or GB/T
- IP 44/54
- Customization possible

Possible configurations

The DC wallbox is available in several configurations. Any configuration is visually customizable to your brand. ABB supports all global open DC charging standards.

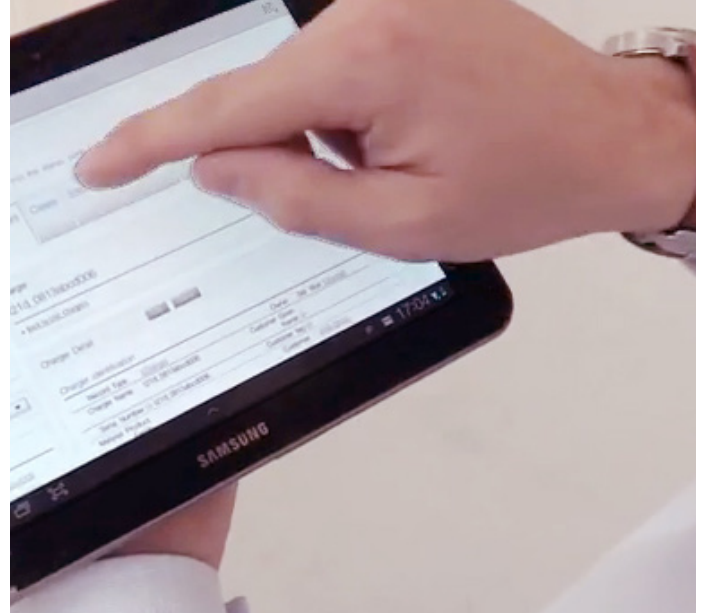
Name	Outputs	Availability
C	CCS	EU, USA
J	CHAdeMO	EU, USA
Z	GB/T	China

ABB Charger Care

ABB guarantees best in class charger uptime. With a Service Level Agreement (SLA) ABB helps achieving maximum uptime for charger networks and to secure your charging business.

ABB takes full ownership of the uptime of your charging network. The Charger Service Centre and tailored diagnostic tooling enable responding effectively and timely to any irregularity. ABB will respond globally with a professional staff of technicians and always resolve the situation.

Depending on the SLA, a customer receives pro-active advice and first priority case resolution. Upon wish, the maintenance and repair concept can be tailored towards your organization.



Connected services

To get the most out of an EV charging network, ABB offers Internet based Connected services that fit a variety of EV infrastructure business models.

APIs to connect to your added value systems

ABB implements APIs based on customer's needs. All ABB APIs have openly available specifications. Available APIs are:

- Open Charge Point Protocol (OCPP) API
- Real-time status API
- Support API
- Home Charger API

Web solutions modules

ABB offers three web solutions: Operator Pro for networks in closed communities, Driver Care and Payment for public charger networks. Each web solution consist out of several modules. An overview of the three packages and their modules is shown below. Extending a package with additional modules is possible.

Modules	Operator Pro	Driver Care	Payment
Status	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Statistics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Configuration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Advanced statistics	<input checked="" type="checkbox"/>		
Access management	<input checked="" type="checkbox"/>		
Cases		<input checked="" type="checkbox"/>	
Notifications		<input checked="" type="checkbox"/>	
Payment management			<input checked="" type="checkbox"/>

Contact us

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