Electric Vehicle Charging Infrastructure Terra multi-standard DC charging station 23

The Terra multi-standard DC charging station 23 is a configurable single, dual or triple outlet 20 kW fast charging station. Its flexible multi-protocol design supports CCS, CHAdeMO and AC functionality depending on the individual charging needs of each customer. Designed for park-and-charge, the Terra 23 is ideal for use at car dealerships, offices, commercial parking locations and company car parking.





The Terra multi-standard DC charging station 23 combines industry standardization with fast charging technology to support all current and next generation vehicles. Its multiprotocol design allows for easy tailoring to support CCS and CHAdeMO 1.0 for DC fast charging, as well as the EN61851-1 standard for AC charging (type 2, mode 3).

All ABB chargers come with Internet based Connected services to allow customers to easily connect their chargers to different software systems like back-offices, payment platforms or smart grid energy systems. This allows for remote assistance, tailored diagnostic trouble shooting and repair, and remote updates and upgrades. A reliable, secure, cost efficient and future proof connectivity solution, based on open industry interfaces.

Main features

- CCS standard DC fast charging
 - 30 to 80% of a 24 kW battery in 30 minutes
- Future proof connection via open industry standards
 - Flexible interfacing with added value systems
 - Remote uptime monitoring and assistance
 - Remote updates and upgrades
 - (Field) upgradeable to support 50 kW
- Easy to use
 - 8" daylight readable touch screen display
 - Graphic visualisation of charging progress
 - RFID authorization
- Aesthetic all weather stainless steel enclosure
- Quick and easy installation
 - Using widely available 3 x 32A as input
- Low operational noise

Applications

- EV dealers and importers
- Office owners and operators
- Parking operators
- Retail locations: supermarkets, shopping malls, banks, etc.
- EV car rental/sharing
- EV Infrastructure operators and service providers

Key optional features

- CHAdeMO 1.0 DC fast charging expansion package
- AC fast charging expansion package (T or G)
- 22 kW AC socket (T) or connector (G)
- Simultaneous AC and DC charging
- Option: Remote resettable MCB and RCD to maximize uptimes
- Pin code authorization
- Input power limiting software to avoid expensive grid upgrades
- Web modules for statistics and access management
- Integration with back-offices, payment platforms and smart grid energy systems
- Wider temperature range: -35°C to +50°C
- Customized branding possibilities

Possible configurations

The Terra 23 is available in several configurations: C, CT (CCS and AC socket), CJ (CCS and CHAdeMO) and CJG (CCS, CHAdeMO and AC connector)



Outlet specifications	C (default)	J (option)	G (option)	T (option)
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
Connection standard	EN61851-23 / DIN 70121	CHAdeMO 1.0	EN61851-1:2010	EN61851-1:2010
Connector/socket type	Combo-2	CHAdeMO / JEVS G105	IEC62196 mode-3 type-2	IEC62196 mode-3 type 2
Cable length	3,9 m	3,9 m	3,9 m	-
Compatible car brands	BMW, Volkswagen, GM,	Nissan, Mitsubishi,	Renault, Daimler, Tesla, Smart,	Renault, Daimler, Tesla, Smart,
	Porsche, Audi	Peugeot, Citroen, Kia	Mercedes	Mercedes, Volvo, Opel



General s	pecifications
-----------	---------------

General specifications		
Environment	Indoor / outdoor	
Operating temperature	-10 °C to +50 °C	
	(de-rating characteristic applies)	
	Option: -35 °C to +50 °C	
Storage temperature	-40 °C to +70 °C	
Compliance and safety	CE / Option: CHAdeMO	
Input AC power connection	3P + N + PE	
Input voltage range	400 V _{AC} +/-10% (50 Hz or 60 Hz)	
Max. rated input current & power	C, CJ: 32 A, 23 kVA	
	CT, CJG: 63 A, 45 kVA	
	Power limiting options available	
Power factor (full load)	> 0.96	
Efficiency	94% at nominal output power	
RFID system	ISO/IEC14443A/B, ISO/IEC15693,	
	FeliCa™ 1, NFC reader mode,	
	LEGIC Prime & Advant	
Network connection	GSM / CDMA / 3G modem, 10/100	
	Base-T Ethernet	
Protection	IP54	
Dimensions (D x W x H)	760 mm x 525 mm x 1900 mm	
Mass	400 kg	

Advantages of connected charging

Flexible interfacing with customer's added value systems







Optimal insight in charger operation





Maximize charger uptime with fast and reliable service







Optimize user experience







For more information please contact:

ABB EV Charging Infrastructure

Delftweg 65 2289 BA Rijswijk The Netherlands

Phone: +31 70 307 6200 +31 70 307 6209 Fax:

www.abb.com/evcharging