

Electric Vehicle Charging Infrastructure

Terra multi-standard DC charging station 53

The Terra multi-standard DC charging station 53 is a configurable single, dual or triple outlet 50 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 en route charging, the Terra 53 is ideal for use at car dealerships, petrol stations and busy urban areas.

The Terra multi-standard DC charging station 53 combines industry standardization with fast charging technology to support all current and next generation vehicles. Its multi-protocol 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% in 15 minutes
- Future proof connection via open industry standards
 - Flexible interfacing with added value systems
 - Remote uptime monitoring and assistance
 - Remote updates and upgrades
- 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
- Low operational noise



Applications

- Highway petrol/service station operators
- Busy urban areas
- Commercial fleet operators
- EV Infrastructure operators and service providers
- CCS EV dealers and importers

Key optional features

- CHAdeMO DC fast charging expansion package
- AC fast charging expansion package (T or G)
 - 22 kW AC socket (T) or 43 kW AC connector (G)
 - Simultaneous AC and DC charging
 - Basic AC meter to measure AC output power
 - Option: MID certified AC meter
 - 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

Outlet specifications	C (default)	J (option)	G (option)	T (option)
Charging standard	CCS	CHAdeMO	Fast AC cable	Fast AC 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}	120 A _{DC}	63 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, Porsche, Audi	Nissan, Mitsubishi, Peugeot, Citroen, Kia	Renault, Daimler, Tesla	Renault, Daimler, Tesla



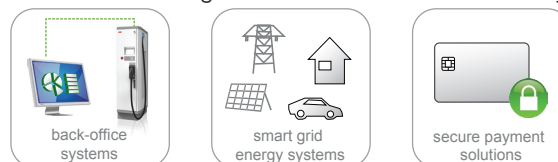
Possible configurations (from left to right): Terra 53 C, Terra 53 CT, Terra 53 CJ, Terra 53 CJG

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	125A, 86 kVA
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
Operational noise level	45-50 dBA
Dimensions (D x W x H)	760 mm x 525 mm x 1900 mm
Mass	400 kg

Advantages of connected charging

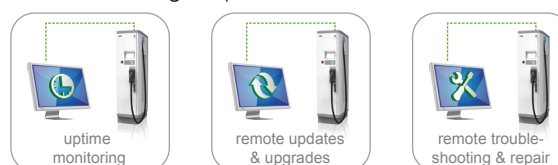
Flexible interfacing with customer's added value systems



Optimal insight in charger operation



Maximize charger uptime with fast and reliable service



Optimize user experience



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