

Electric Vehicle Charging Infrastructure

Terra 23 multi-standard DC charging station

The Terra 23 multi-standard DC charging station is a configurable single or dual outlet, 20 kW fast charging station. Its flexible multi-protocol design supports CCS Combo and/or CHAdeMO functionality depending on the charging needs of each customer. Designed for park-and-charge, the Terra 23 is ideal for 30-90 minute parking applications.

The Terra 23 multi-standard DC charging station combines industry standardization with fast charging technology to support the next generation of electric vehicles. Its multi-protocol design allows for easy tailoring to support SAE Combo (CCS) and CHAdeMO 1.0 for DC fast charging. Seamless integration with several payment and billing platform solutions enables easy and secure payments via smart-phone and/or RFID card. The Terra 23 multi-standard DC charging station's smart connectivity allows remote monitoring, maintenance and functional upgrades that provide customers with the tools necessary to gather granular usage statistics and reports.

Main features

- DC standard fast charging station
 - 30 to 80% in 35 minutes
- Single outlet units field-upgradable
- Web connected and future proof
 - Remote assistance, management and servicing
 - Smart software upgradeability
- Easy to use
 - 8" daylight readable touch screen display
 - Display charging progress
 - RFID authorization
- Aesthetic design and all weather steel housing
- Quick and easy installation
- Low operational noise



Applications

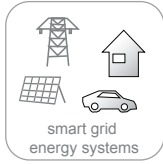
- Car dealerships
- Office owners and operators
- Parking operators
- Retail locations such as supermarkets and shopping malls
- College campuses
- Fleet operators
- EV infrastructure and service providers

Key optional features

- PIN code authorization
- Input power limiting software avoids expensive grid upgrades
- Galaxy web based management software
 - Statistics module with data per user
 - Fleet access management module
- Point of sale, back office integration to enable external billing and payment solutions
- Charger status information for car navigation purposes
- Wide temperature range: -35°C to +50°C
- Customized branding possibilities and user interface styling
- Extended cable length to allow placement flexibility
- Credit card reader

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



All Terra chargers are connected to ABB's Network Operating Center for monitoring, maintenance, and troubleshooting. ABB offers multiple Connected Services to site owners/operators:

- The Galaxy web-based management software for entry-level operations and analytics.
- Third party OCPP and custom APIs can be developed for more feature rich billing, analytics and diagnostics

Technical specifications

System	Multi-standard DC charging station
Environment	Indoor / outdoor
Operating temperature	-35 °C to +50 °C (de-rating characteristic applies)
Storage temperature	-40 °C to +70 °C
Compliance and safety	c UL us
Input	
AC power connection	3P + PE
Input voltage range	480 V _{AC} +/- 10% (60 Hz)
Max. rated input current & power	35A, 25 kVA
Power factor (full load)	> 0.96
Efficiency	95% at nominal output power
DC output	
Maximum output power	20 kW
Output voltage range	200 – 500 V _{DC} (Combo-1) 50 – 500 V _{DC} (CHAdeMO)
Maximum output current	50 A _{DC} +/- 5% (Combo-1) 50 A _{DC} (CHAdeMO)
General	
DC connection standard	EN61851-23 / DIN 70121 Combo-1 and/or CHAdeMO 1.0
DC cable length	12 ft (optional: 20 ft)
DC plug type	Combo-1 / CHAdeMO
RFID system	ISO/IEC14443A/B, ISO/IEC15693, FeliCa™ 1, NFC reader mode
Network connection	GSM / CDMA modem 10/100 Base-T Ethernet
Power consumption idle	25 W (max)
Protection	Type 3R
Operational noise level	< 55 dBA
Dimensions (D x W x H)	30" x 21" x 75" 760 mm x 525 mm x 1900 mm
Weight	800 lbs / 360 kg

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