

# Electric Vehicle Charging Infrastructure

## Terra 53 multi-standard DC charging station

The Terra 53 multi-standard DC charging station is a configurable single or dual port 50 kW fast charging station. Its flexible multi-protocol design allows Combo (C), CHAdeMO (J) or dual functionality (CJ) depending on the charging needs of each customer. Designed for the “charge and go” segment, the Terra 53 multi-standard DC charging station is ideal for use at car dealerships, fuel stations and high turnover parking applications.

The Terra 53 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 smartphone and/or RFID card. The Terra 53 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 15 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

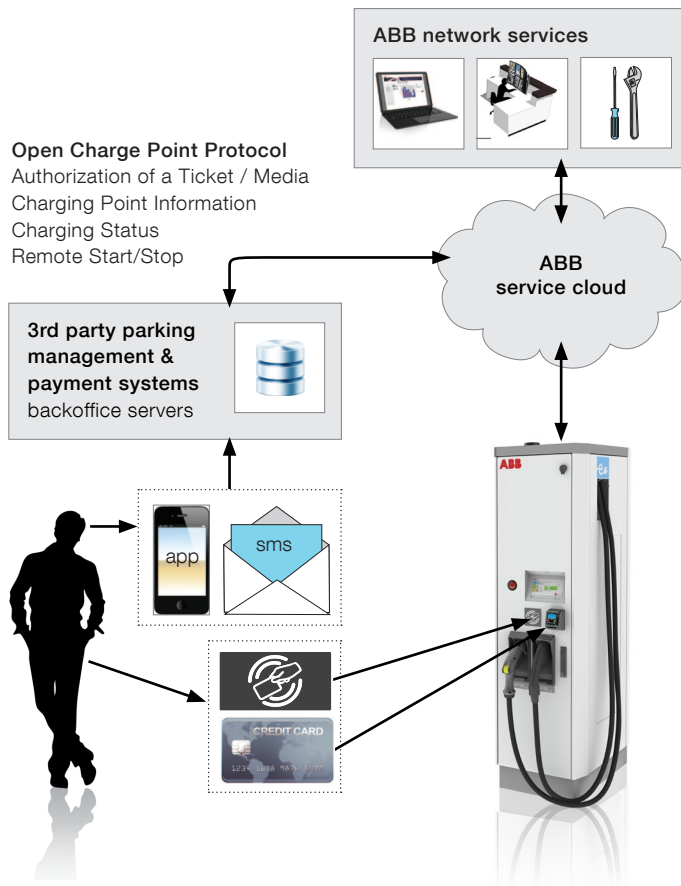


### Applications

- Highway fuel stations
- High turnover parking
- Commercial 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



### Connected services

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

<b>System</b>	Multi-standard DC charging station
<b>Environment</b>	Indoor / outdoor
<b>Operating temperature</b>	-35 °C to +50 °C (de-rating characteristic applies)
<b>Storage temperature</b>	-40 °C to +70 °C
<b>Compliance and safety</b>	c UL us
<b>Input</b>	
<b>AC power connection</b>	3P + PE
<b>Input voltage range</b>	480 V <sub>AC</sub> +/-10% (60 Hz)
<b>Max. rated input current &amp; power</b>	75A, 60 kVA
<b>Power factor (full load)</b>	> 0.96
<b>Efficiency</b>	95% at nominal output power
<b>DC output</b>	
<b>Maximum output power</b>	50 kW
<b>Output voltage range</b>	200 – 500 V <sub>DC</sub> (Combo-1) 50 – 500 V <sub>DC</sub> (CHAdeMO)
<b>Maximum output current</b>	165 A <sub>DC</sub> +/-5% (Combo-1) 120 A <sub>DC</sub> (CHAdeMO)
<b>General</b>	
<b>DC connection standard</b>	EN61851-23 / DIN 70121 Combo-1 and/or CHAdeMO 1.0
<b>DC cable length</b>	12 ft (optional: 20 ft)
<b>DC plug type</b>	Combo-1 / CHAdeMO
<b>RFID system</b>	ISO/IEC14443A/B, ISO/IEC15693, FeliCa™ 1, NFC reader mode
<b>Network connection</b>	GSM / CDMA modem 10/100 Base-T Ethernet
<b>Power consumption idle</b>	25 W (max)
<b>Protection</b>	Type 3R
<b>Operational noise level</b>	< 55 dBA
<b>Dimensions (D x W x H)</b>	30" x 21" x 75" 760 mm x 525 mm x 1900 mm
<b>Weight</b>	880 lbs / 400 kg

### ABB Inc.

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