

Electric Vehicle Infrastructure

Terra 94/124/184 UL DC Fast Charging Station



ABB's Terra all-in-one DC fast chargers offer power up to 180 kW, with convenient charging times for every EV – including those with HV batteries.

The compact, modular design makes it perfect for retail, highway or fleet use, with power sharing to further optimize utilization. All Terra chargers feature connectivity for remote services and OCPP enablement.

The Terra 94/124/184 is available with CCS-only, CCS-dual and CCS+CHAdeMO dual outlets. Cable management options enhance reliability and usability.

Flexible configuration

ABB's Terra DC Fast chargers from 50 kW to 180 kW are designed for the most compact, reliable and future-proof demands. In addition to a range of power selections, Terra chargers can be configured with CCS and CHAdeMO connector cables, in single or dual outlet format. Cable management, payment enablement and connectivity choices also offer owners, operators and site hosts options tailored to the needs of every charging site, from public to fleet needs.

The most reliable, scalable choice

ABB's Terra chargers offer redundant power architecture for the highest uptime in the EV infrastructure industry. Additionally, Terra chargers

can meet the needs of high voltage BEVs up to 920V, making these systems fully compatible with all current and future EVs. With a host of configuration options, and upgradability, Terra DC fast chargers will follow EV market growth over time.

Power sharing for high utilization

Enabling every business model is critical for EV charging infrastructure. With this goal in mind, ABB has designed the Terra 124 and Terra 184 models with power sharing technology which capable of charging two vehicles at the same time. Simultaneous charging can deliver higher utilization for every charging asset, a major key to public and fleet electrification success.

ABB Terra "all in one" chargers are offered from 50 kW to 180 kW. The Terra 94 and Terra 124 can be upgraded to 180 kW over time.

Note: upgrading charging systems may require a grid connection upgrade as well as field certification.



Terra 54
one EV
up to
50 kW



Terra 94
one EV
up to
90 kW

upgradable



Terra 124
one EV
up to
120 kW



Terra 124
two EVs
each up to
60 kW

upgradable



Terra 184
one EV
up to
180 kW



Terra 184
two EVs
each up to
90 kW

Key features

- A compact, all-in-one charger from 90 kW to 180 kW
- Terra 124 and Terra 184 can fast-charge two vehicles at the same time
- Paralleled power module topology with automatic failover offers high uptime through redundancy
- Delivers full output power continuously and reliably over its lifetime
- Flexible configurations include CCS-single, CCS-dual and CCS+CHAdeMO-dual outlets
- Up to 920 VDC for every passenger or fleet EV
- Bright, daylight readable touchscreen display with graphic visualization of charging session
- High short circuit current rating
- EMC Class B certified for safe use at fuel stations, retail centers, offices, and residential-adjacent sites
- Design enables ADA compliant installations
- RFID authorization modes
- Always connected, enabling remote services, updates and upgrades
- Robust all-weather powder-coated stainless steel enclosure
- Quick and easy installation as well as serviceability

Optional features

- Reliable cable management system available as ordered or field upgrade
- Customizable user interface
- Integrated payment terminal
- Web tools for statistics and PIN access management
- Integration with OCPP networks, payment platforms and energy management
- Autocharge and ISO 15118 enabled

Why charging operators and fleets prefer ABB

- ABB offers the most advanced, safe and reliable EV infrastructure and grid connected technologies
- ABB Connected Services enable every business and remote services model
- ABB's decade of EV charging experience and close cooperation with EV OEMs, networks and fleets

Specifications	Terra 94	Terra 124	Terra 184
Electrical			
Output power*	90 kW continuous	120 kW or 60 kW x 2 continuous	180 kW or 90 kW x 2 continuous
AC Input voltage	480Y / 277 VAC +/- 10% (60 Hz)		
AC input connection	3-phase: : L1, L2, L3, GND (no neutral)		
Nominal input current and input power rating	115 A, 96 kVA	153 A, 128 kVA	230 A, 192 kVA
Recommended upstream circuit breaker(s)	150 A	200 A	300 A
Power Factor*	> 0.96		
Current THD*	< 5%		
Short circuit current rating	65 kA		
DC output voltage	CCS-1: 150 - 920 VDC; CHAdeMO: 150 - 500 VDC		
DC output current	CCS-1: 200 A; CHAdeMO: 200 A (125 A optional)		
Efficiency*	95%		
Interface and Control			
Charging protocols	CCS1, CCS2 and CHAdeMO 1.2		
User interface	7" high brightness full color touchscreen display		
RFID system	ISO/IEC 14443A/B, ISO/IEC 15393, FeliCa™ 1, NFC reader mode, Mifare, Calypso, (option: Legic)		
Network connection	GSM/3G/4G modem; 10/100 Base-T Ethernet		
Communication	OCPP 1.6 Core and Smart Charging Profiles; Autocharge		
Supported languages	English (others available on request)		
Environment			
Operating temperature	-35 °C to +55 °C / -31 °F to +131 °F (de-rating characteristics apply at extreme temperatures)		
Recommended storage	-10 °C to +70 °C / 14 °F to +158 °C (dry environment)		
Protection	IP54, NEMA 3R; indoor and outdoor rated		
Humidity	5% to 95%, non-condensing		
Altitude	2000 m (6560 ft)		
General			
Charge cable	6 m (20 ft) standard; 8 m (26 ft) optional		
Dimensions (H x W x D)	1900 x 565 x 880 mm; 74.8 x 22.2 x 34.6 in		
Weight	350 kg / 775 lbs	365 kg / 800 lbs	395 kg / 870 lbs
Compliance and safety	UL 2202, CSA No. 107.1-16; UL 2231-1, UL 2231-2, CSA STD C22.2 No. 107.1; NEC Article 625, EN 61851, EN 62196; CHAdeMO 1.2; DIN 70121, ISO 15118; IEC 61000-6-3; EMC Class B, FCC Part 15		

*Data shown at nominal output power

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