Terra 124/184 UL Product guide

Terra chargers: The most widely deployed DC fast charging solutions in the world.

- Flexible configurations for high utilization
- High-voltage, high current technology
- Reliable, compact and flexible design
- Always connected, always smart

With more than a decade pioneering EV charging technologies, ABB E-mobility is driving the future of zero emission mobility.

1M+
EV chargers
sold worldwide

in operation
across
85+
countries

A range of
chargers up to
450 kW

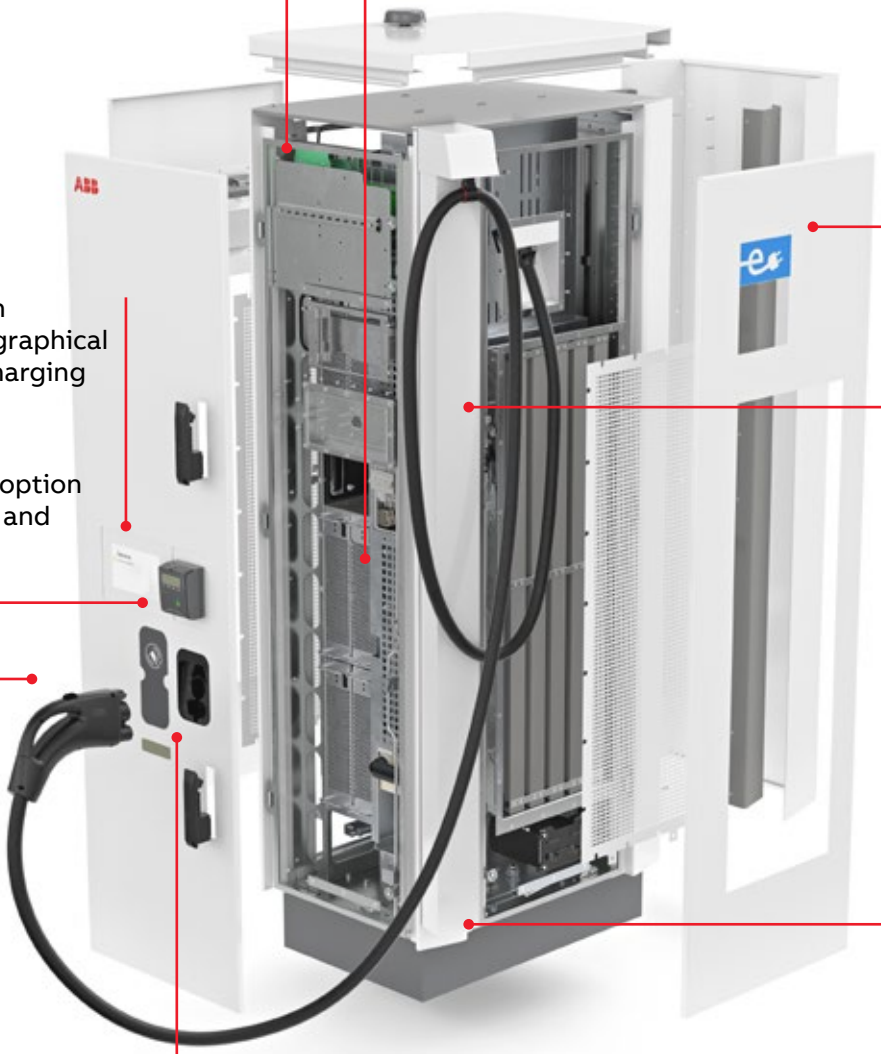
13+ years
of EV charging
field experience

24/7
connectivity offered
for remote services

Terra 124/184 UL DC Fast Charger
At a glance

CONNECTED for 24/7 remote services and updates to support every new EV on the road - plus easy remote OCPP integration

HIGHLY RELIABLE power modules deliver up to 920 VDC in all power configurations for current and future electric cars, trucks, vans and buses



ROBUST all-weather powder-coated stainless steel enclosure

LCD touchscreen with high-brightness and graphical visualization of the charging process

PAYMENT TERMINAL option including contactless and EMV chip capability

CONVENIENT and hassle-free reach with retractable cable management option

HIGH UTILIZATION with high power, high current charging for 1 or 2 EVs in flexible connector combinations (single CCS configuration shown, NACS coming soon)

EASY installation and serviceability for fast commissioning, maintenance and field services

AUTOMATIC authentication with CCS connector via OCPP and Auto-charge functionality as well as ISO 15118 implementations

MAX CHARGING POWER
Terra 124: 120 kW (and 2 x 60 kW)
Terra 184: 180 kW (and 2 x 90 kW

MAX CHARGING VOLTAGE
CCS 920 VDC
NACS 920 VDC
CHAdeMO 500 VDC

DIMENSIONS
Height 1900 mm / 74.8 in
Width 565 mm / 22.6 in
Depth 880 mm / 34.6 in
Weight 395 kg / 871 lbs

Why Terra DC Fast Chargers?
Advanced, flexible, compact and smart

Power sharing for high utilization

- Terra 124 and Terra 184 can charge two vehicles simultaneously
- High utilization of charging assets benefit both public and fleet business models
- Supports all open charging standards in flexible configurations
- Safety certified to the highest standards

Future-proof, flexible high-voltage technology

- Flexible, redundant power architecture supports high uptime
- High-voltage charging range up to 920 V
- Fully compatible with current and future EVs
- Choices for power delivery up to 180 kW, following EV market growth

Reliable, compact and flexible design

- Based on the Terra platform, the most widely deployed DCFC family in the world
- Space-saving, all-in-one footprint with very easy installation and servicing
- Robust construction for all operational environments
- Cable management options enhance longevity

Always connected, always smart

- 24/7 connectivity, high network uptime
- Remote services with remote firmware updates and upgrades
- OCPP integration-ready as well as ABB Web Tools functionality
- Autocharge and ISO 15118-ready for plug and charge operation

Reliable fast charging
Across demanding use cases

Metro or fleet sites
The Terra 124 charger can charge two vehicles simultaneously while drivers are shopping, dining or at the movies.

one EV up to **120 kW**

two EVs each up to **60 kW**

Highway or fleet sites
Terra 184 chargers can add 100 miles of range in as little as 10 minutes or fast-charge two vehicles at the same time in less than 20 minutes.*

one EV up to **180 kW**

two EVs each up to **90 kW**

NEVI charging programs
The Terra 184 NEVI configuration charger provides dedicated power to 180 KW and enables NEVI program standards and requirements

one EV up to **180 kW**

* Actual charging speed may vary by EV model and charging conditions.

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Link to the Terra 124/184 Data Sheet

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Link to the Terra 184 NEVI informational guide with product data

Terra charging times

All-in-one charging for every EV

		Charging time (minutes)				
		50 kW Terra 54 Terra 54HV	**120 kW** Terra 124		**180 kW** Terra 184	
			2 EVs	1 EV	2 EVs	1 EV
Car	60 kWh BEV 400 VDC	50	40	20	25	13
	90 kWh BEV 400 VDC	70	60	30	40	20
	100 kWh BEV 800 VDC	80	65	33	45	22
Bus/Truck	120 kWh BEV School Bus 400 VDC	95	80	40	55	26
	150 kWh BEV Delivery Van 800 VDC	120	100	50	65	33
	200 kWh BEV Work Truck 800 VDC	160	133	66	88	44
	300 kWh BEV 60' Transit Bus 800 VDC	240	200	100	130	66

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Charge times shown based on average vehicle battery management system (BMS) requesting charging power from 20% to 80% under mild environmental conditions. Data assumes vehicles capable of charging at cited power levels.

Designed for flexibility
A configuration for every use case

Terra 124/184 C
Single outlet CCS shown with cable management system

Terra 124/184 CC
Dual outlet CCS shown with cable management system

Terra 184 NEVI
Designed to meet the needs of NEVI programs

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Link to the Terra 124/184 Data Sheet

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Link to the Terra 184 NEVI informational guide with product data

Power levels
- 120 kW / 60 kW shared
- 180 kW / 90 kW shared
- 180 kW (NEVI)

Charging standards
- CCS1
- NACS
- CHAdeMO

Cable management
- Reliable, field-tested system
- Designed to meet all cable sizes

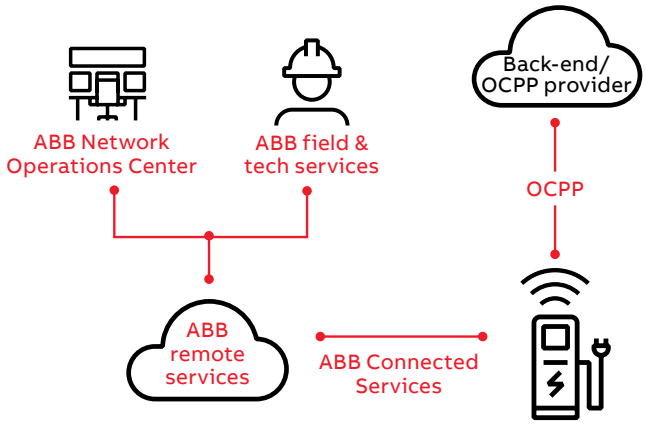
CCS cable connectors
- High current CCS: 300-400 A

User access / payment
- OCPP Integration
- Credit card reader
- PIN via Web Tools
- ISO 15118

Flexible network enablement

Back-office integrations backed by ABB connectivity

Network communications
ABB E-mobility has integrated with most charging networks around the world for OCPP support across public and fleet charging operations. ABB chargers can be operated using a direct OCPP connection while linking to ABB's advanced diagnostics and firmware update services for additional intelligence, technical support as well as reduced maintenance.



Better and faster support: Chargers connected to ABB's network operations center can achieve fast remote support from ABB network engineers. This leads to higher uptime of a charger network, minimizes the number of unplanned on-site visits, and can reduce overall operational costs.

Scalability and security: IT resources can scale in the ABB Ability cloud while connectivity monitoring is supported by ABB around the clock. ABB leverages Microsoft Azure based security with fewer backend connections to monitor.

OCPP Integrations

The Open Charge Point Protocol (OCPP) includes a broad set of messages with a wide range of functionality for enterprise telematics and usage data. The transaction-based set-up of the messages makes it easy to connect to a back-end system to process charging sessions, define usage models and handle data. Other capabilities include integration with apps and energy management, such as with OCPP Smart Charging Profiles.

Plug and charge

Eliminating manual authentication methods for drivers while delivering granular data sets to network operators and fleets has never been easier with 'plug and play' charging solutions.

ABB supports Autocharge, in conjunction with an OCPP network integration, to meet vehicle-based authentication demands seamlessly with any CCS vehicle.

Additionally, ABB has proactively enabled ISO 15118 (Plug & Charge) for its charging systems to deliver more advanced plug and play charging experience for the next generation of electric vehicles.

ABB E-mobility services

For high reliability and optimal user experience

Operational excellence
Charging infrastructure must be optimized for the highest utilization and lowest downtime. ABB E-mobility's remote and real-time services can meet that demand, incorporating more than a decade of experience with 1M+ intelligent chargers deployed across the globe.

ABB E-mobility's family of EV chargers are the easiest equipment in the market to service, with high uptime due to its innovative modularity, round the clock connectivity and experience-led design.

Remote services

- Round-the-clock connectivity
- Remote services and diagnostics
- Firmware updates and upgrades
- Web tools

On-site service & parts

- Standard & extended warranty execution
- Service level agreements
- Preventive service and maintenance
- Corrective service and maintenance
- Spare parts stocking programs

Custom services

- OCPP integration
- Plug and charge integration testing
- Interoperability testing and validation

Training

- Standardized online training
- Product and service classroom training
- Customized service training programs
- Third-party service training programs

To learn more about charging deployment strategies that meet EV driver expectations while supporting operational goals, please read the ABB E-mobility white paper, "Charger reliability best practices."

ABB E-mobility facilitates charger reliability through our comprehensive approach to service, including Service Level Agreements (SLAs) that support high uptime requirements.

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