



Electrify the road

Terra DC fast chargers. The most successful EV fast chargers in the market, ideal for urban applications, retail and refueling stations.



- Compact footprint
- Maximized revenue generation
- Future ready

The Terra DC fast chargers, including Terra 94, Terra 124, Terra 184, are an extension of the DC fast chargers product line. They are designed for convenient charging of all electric vehicles, including future models with high voltage battery systems. The compact size makes it perfect for urban use, with flexibility to upgrade charging power up to 180kW and ability to charge up to 3 vehicles at the same time.

Fast charging beyond 50 kW

City Charging Point

The Terra chargers can provide a quick refill adding 100 km of range in as little as 25 minutes (Terra 54) or 15 minutes (Terra 94).

Retail/Shopping Center

The Terra 124 charger can provide a full battery charge to two vehicles simultaneously while drivers are shopping. A third vehicle can be charged with an AC outlet option.

Fast Charging Station

The higher power versions of the Terra chargers can add 100 km of range in as little as 8 minutes* and fast-charge two vehicles at the same time



one electric vehicle up to **90 kW**



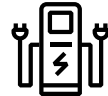
one electric vehicles up to **120 kW**



two electric vehicles up to **60 kW**



one electric vehicle up to **180 kW**

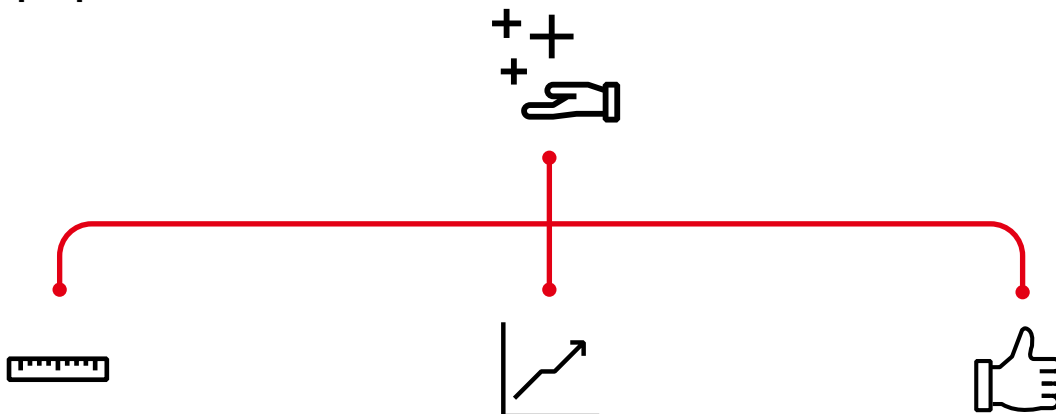


two electric vehicles up to **90 kW**



* actual charging speed depends on the electric vehicle model and charging condition

Value proposition



Compact footprint

- Small footprint makes it perfect for urban environments with limited available space
- No need for separate power cabinets, significantly reducing the installation costs versus other high power charging solutions.

Maximized revenue generation

- Supports all charging standards and all battery sizes
- Can charge up to three vehicles at once (2 charging fast and 1 slow/ AC charging)
- Large number of customizations: credit card payment terminal, cable management system, customized screen and logos, branded cabinet

Future ready



- With output voltage up to 920 VDC it's ready to charge the next generation of EV's
- Supports future charging needs with easy power upgrade up to 180kW

Technical specification

	Terra 184	Terra 124
Product information		
Charging type	DC fast charging and AC type-2 charging	DC fast charging and AC type-2 charging
Outlet options	C: CCS cable, J: CHAdeMO cable, T: AC Type-2 socket	C: CCS cable, J: CHAdeMO cable, T: AC Type-2 socket
Input AC power rating	C,CC, CJ: 280 A, 192 kVA @ 50Hz CCT/CJT: 310 A, 214 kVA @ 50Hz	C,CC, CJ: 187 A, 128 kVA @ 50Hz CCT/CJT: 217 A, 150 kVA @ 50Hz
Input voltage range	400 VAC +/- 10% (50 Hz or 60 Hz) - CE Version, 480 VAC or 270 VAC +/- 10% (50 Hz or 60 Hz) - UL Version	
DC output power rating	180 kW	120 kW
AC output power rating (optional)	22 kW	22 kW
DC output voltage	150-920 Vdc	150-920 Vdc
Number of EV served	Up to 3	Up to 3
Cable length	3.9 m Optional: 6.0 m / 8.0 m	3.9 m Optional: 6.0 m / 8.0 m
CCS cables maximum current	200 A, 300 A (Optional)	200 A, 300 A (Optional)
CHAdeMO cables maximum current	200 A, 125 A (Optional)	200 A, 125 A (Optional)
Electro-Magnetic Compatibility	Class B (Residential) conducted and Class B (Residential) radiated emissions according to EN 61000-6-3:2007	
Network type	TN-S, TN-C, TN-C-S, TT (Requires external RCD)	TN-S, TN-C, TN-C-S, TT (Requires external RCD)
Connector types	3P + N + PE	3P + N + PE
Protection	Overcurrent, overvoltage, undervoltage, ground fault including DC leakage protection, integrated surge protection	
Overvoltage category	Type II	Type II
Power factor (full load)	> 0.96	> 0.96
THDi	< 4.5%	< 4.5%
Efficiency	> 95% (peak)	> 95% (peak)
Standby power	80 W	80 W
Short circuit current	10 kA	10 kA
Pre-charge current	< 1 A	< 1 A
Inrush current	< 100 A	< 100 A
Leakage current	0.8 mA	0.8 mA
Energy metering	Optional: MID metering for AC and DC outlets Optional: Eichrecht/PTB compliant metering solution for AC and DC outlets	
Cellular communication	GSM / 4G / LTE	GSM / 4G / LTE
User interface		
Connectivity	Internet access via 4G / 3G / Ethernet (RJ45)	Internet access via 4G / 3G / Ethernet (RJ45)
User authentication	App, ISO 15118 Plug'n'Charge, RFID, PIN code	App, ISO 15118 Plug'n'Charge, RFID, PIN code
User interface	7" LCD high-contrast touchscreen	7" LCD high-contrast touchscreen
Communication protocols	OCPP 1.5 / 1.6 / 2.0 and OPC-UA	OCPP 1.5 / 1.6 / 2.0 and OPC-UA
RFID Reader	ISO 14443 A + B to part 4 and ISO/IEC 15693, Mifare, NFC, Calypso, Ultralight, PayPass, HID; and more	
Emergency button	Yes. The button can be removed with a retrofit kit.	
Configuration		
Software update	over-the-air updates via ABB web portal, OCPP 1.6	
Control and configuration	ABB web portal, on-board Service Portal, OCPP 1.6, OPC-UA	
Multilanguage system	English, Italian, Spanish, Germany and more than 50 languages available and new languages configurable via ABB Web Tool	
General characteristics		
IP and IK rating	IP-54 and IK-10 (cabinet) / IK-8 (touchscreen)	
Enclosure type	Stainless steel 430 and Aluminium	
Operational altitude	Up to 2000 m	Up to 2000 m
Operating temperature range	-35 °C to +55 °C	
Temperature derating	Up to 40 °C: 100% output power, Above 40 °C: no de-rating for the first 15 minutes; afterward, 1% power reduction every 1 °C	
Storage temperature range	-40 °C to +70 °C	-40 °C to +70 °C
Humidity	20-95 % Rh non-condensing	
Mounting	Free-standing cabinet	
Dimensions (H x W x D)	1900 x 565 x 880 mm	
Mass	395 kg	365 kg
Certification and standards		
Charging system	IEC 61851-1 ed 3, IEC 61851-21-2 ed 1, IEC 61851-23 ed 1, IEC 61851-24 ed 1, IEC 62196-2, IEC 62196-3, IEC 61000	
Communication to the EV	DIN 70121, ISO/IEC 15118 series ed 1 with PnC and EIM, CHAdeMO 1.2	
Communication to the backend	OCPP 1.6 JSON	
Safety	Risk assessment, Fire analysis	
Warranty	Base warranty 24 months after Site Acceptance Test or 30 months after factory delivery. Warranty extensions available	

Terra 94	Terra 54	Terra 24
DC fast charging and AC type-2 charging	DC fast charging and AC type-2 charging	DC fast charging and AC type-2 charging
C: CCS cable, J: CHAdeMO cable, T: AC Type-2 socket	C: CCS cable, J: CHAdeMO cable, G: AC Type-2 cable, T: AC Type-2 socket	C: CCS cable, J: CHAdeMO cable, G: AC Type-2 cable, T: AC Type-2 socket
C,CC, CJ: 140 A, 96 kVA @ 50Hz	C, CJ: 88 A, 55 kVA @ 50Hz	CJ: 32 A, 23 kVA @ 50Hz
CCT/CJT: 170 A, 118 kVA @ 50Hz	CT, CJT, CG, CJG: 112A, 77 kVA CG, CJG: 143 A, 98 kVA @ 50Hz	CT, CG, CJG with 22 kW AC outlet: 63 A, 43 kVA @ 50Hz
400 VAC +/- 10% (50 Hz or 60 Hz) - CE Version,	480 VAC or 270 VAC +/- 10% (50 Hz or 60 Hz) - UL Version	
90 kW	50 kW	20 kW
22 kW	43 or 22 kW	43 or 22 kW
150-920 Vdc	150-920 Vdc (HV), 150-500 Vdc	150-500 Vdc
Up to 2	Up to 2	Up to 2
3.9 m	3.9 m	3.9 m
Optional: 6.0 m / 8.0 m	Optional: 6.0 m / 8.0 m	Optional: 6.0 m / 8.0 m
200 A, 300 A (Optional)	125 A	125 A
200 A, 125 A (Optional)	125 A	125 A
Class B (Residential) conducted and Class B (Residential) radiated emissions according to EN 61000-6-3:2007		
TN-S, TN-C, TN-C-S, TT (Requires external RCD)	TN-S, TN-C, TN-C-S, IT, TT (Requires external RCD)	TN-S, TN-C, TN-C-S, IT, TT (Requires external RCD)
3P + N + PE	3P + N + PE	3P + N + PE
Overcurrent, overvoltage, undervoltage, ground fault including DC leakage protection, integrated surge protection		
Type II	Type II	Type II
> 0.96	> 0.96	> 0.96
< 4.5%	< 5%	< 5%
> 95% (peak)	> 94% (peak)	> 94% (peak)
80 W	80 W	80 W
10 kA	10 kA	10 kA
< 1 A	< 1 A	< 1 A
< 100 A	< 100 A	< 100 A
0.8 mA	0.8 mA	0.8 mA
Optional: MID metering for AC and DC outlets		
Optional: Eichrecht/PTB compliant metering solution for AC and DC outlets		
GSM / 4G / LTE	GSM / 4G / LTE	GSM / 4G / LTE
Internet access via 4G / 3G / Ethernet (RJ45)	Internet access via 4G / 3G / Ethernet (RJ45)	Internet access via 4G / 3G / Ethernet (RJ45)
App, ISO 15118 Plug'n'Charge, RFID, PIN code	App, ISO 15118 Plug'n'Charge, RFID, PIN code	App, ISO 15118 Plug'n'Charge, RFID, PIN code
7" LCD high-contrast touchscreen	7" LCD high-contrast touchscreen	7" LCD high-contrast touchscreen
OCPP 1.5 / 1.6 / 2.0 and OPC-UA	OCPP 1.5 / 1.6 / 2.0 and OPC-UA	OCPP 1.5 / 1.6 / 2.0 and OPC-UA
ISO 14443 A + B to part 4 and ISO/IEC 15693, Mifare, NFC, Calypso, Ultralight, PayPass, HID; and more		
Yes. The button can be removed with a retrofit kit.		
over-the-air updates via ABB web portal, OCPP 1.6		
ABB web portal, on-board Service Portal, OCPP 1.6, OPC-UA		
IP-54 and IK-10 (cabinet) / IK-8 (touchscreen)		
Stainless steel 430 and Aluminium		
Up to 2000 m	Up to 2000 m	Up to 2000 m
-35 °C to +55 °C	-35 °C to +55 °C	-35 °C to +55 °C
	Up to 45 °C: 100% output power Above 45 °C: no de-rating for the first 15 minutes; afterward, 2% power reduction every 1 °C	
-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C
20-95 % Rh non-condensing	20-95 % Rh non-condensing	20-95 % Rh non-condensing
Free-standing cabinet	Free-standing cabinet	Free-standing cabinet
1900 x 565 x 880 mm	1900 x 565 x 780 mm	1900 x 565 x 780 mm
350 kg	325 kg	275 kg
IEC 61851-1 ed 3, IEC 61851-21-2 ed 1, IEC 61851-23 ed 1, IEC 61851-24 ed 1, IEC 62196-2, IEC 62196-3, IEC 61000		
DIN 70121, ISO/IEC 15118 series ed 1 with PnC and EIM, CHAdeMO 1.2		
OCPP 1.6 JSON		
Risk assessment, Fire analysis		
Base warranty 24 months after Site Acceptance Test or 30 months after factory delivery. Warranty extensions available		

Ordering codes

	Voltage level (Vdc)	Rated power (kW)	DC connector 1	DC connector 2	AC connector	
Low voltage power trains						
	150-500	20	CCS-2		AC Type-2 socket (22 kW)	
			CCS-2		AC Type-2 cable (22 kW)	
				CCS-2	CHAdeMO	
				CCS-2	CHAdeMO	AC Type-2 cable (43 kW)
		50		CCS-2		
			CCS-2		AC Type-2 socket (22 kW)	
				CCS-2		AC Type-2 cable (43 kW)
				CCS-2	(CHAdeMO as upgrade)	AC Type-2 cable (43 kW)
				CCS-2		AC Type-2 cable (22 kW)
				CCS-2	CHAdeMO	
				CCS-2	CHAdeMO	AC Type-2 socket (22 kW)
				CCS-2	CHAdeMO	AC Type-2 cable (22 kW)
				CCS-2	CHAdeMO	AC Type-2 cable (43 kW)
	Low and high voltage power trains					
	150-920	50	CCS-2			
			CCS-2		AC Type-2 socket (22 kW)	
			CCS-2		AC Type-2 cable (43 kW)	
			CCS-2		AC Type-2 cable (22 kW)	
				CCS-2	CHAdeMO	
				CCS-2	CHAdeMO	AC Type-2 socket (22 kW)
				CCS-2	CHAdeMO	AC Type-2 cable (43 kW)
				CCS-2	CHAdeMO	AC Type-2 cable (22 kW)
		90		CCS-2		
			CCS-2	CHAdeMO		
				CCS-2	CCS-2	
				CCS-2	CHAdeMO	AC Type-2 socket (22 kW)
		120		CCS-2		
			CCS-2	CHAdeMO		
				CCS-2	CCS-2	
				CCS-2	CHAdeMO	AC Type-2 socket (22 kW)
				CCS-2	CCS-2	AC Type-2 socket (22 kW)
		150		CCS-2		
			CCS-2	CHAdeMO		
				CCS-2	CCS-2	
			CCS-2	CHAdeMO	AC Type-2 socket (22 kW)	
			CCS-2	CCS-2	AC Type-2 socket (22 kW)	
	180		CCS-2			
			CCS-2	CHAdeMO		
			CCS-2	CCS-2		
			CCS-2	CHAdeMO	AC Type-2 socket (22 kW)	
			CCS-2	CCS-2	AC Type-2 socket (22 kW)	

Other features	Type	Order code	Order code
		Standard Cables	High Current Cables (CCS)
	Terra CE 24 CT 0-7M-0-0	6AGC074672	-
	Terra CE 24 CG 22 0-7M-0-0	6AGC073442	-
	Terra CE 24 CJ 0-7M-0-0	6AGC073424	-
	Terra CE 24 CJG 0-7M-0-0	6AGC073423	-
	Terra CE 54 C 0-7M-0-0	6AGC075211	-
	Terra CE 54 CT 0-7M-0-0	6AGC071873	-
	Terra CE 54 CG 0-7M-0-0	6AGC066382	-
	Terra CE 54 CG 0-7M-0-SLA	6AGC071786	-
	Terra CE 54 CG 22 0-7M-0-0	6AGC073428	-
	Terra CE 54 CJ 0-7M-0-0	6AGC063492	-
	Terra CE 54 CJT 0-7M-0-0	6AGC071512	-
	Terra CE 54 CJG 22 0-7M-0-0	6AGC071735	-
	Terra CE 54 CJG 0-7M-0-0	6AGC063056	-
	Terra CE 54 HV C 0-7M-0-0	6AGC070818	-
	Terra CE 54 HV CT 0-7M-0	6AGC077783	-
	Terra CE 54 HV CG 0-7M-0-0	6AGC076835	-
	Terra CE 54 HV CG 22 0-7M-0-0	6AGC080559	-
	Terra CE 54 HV CJ 0-7M-0-0	6AGC076568	-
	Terra CE 54 HV CJT 0-7M-0-0	6AGC077781	-
	Terra CE 54 HV CJG 0-7M-0-0	6AGC066474	-
	Terra CE 54 HV CJG 22 0-7M-0-0	6AGC080560	-
	Terra CE 94 C 0-7M-0-0	6AGC080803	**
	Terra CE 94 CJ 0-7M-0-0	6AGC080805	**
	Terra CE 94 CC 0-7M-0-0	6AGC080804	**
	Terra CE 94 CJT 0-7M-0-0	6AGC080806	**
	Terra CE 124 C 0-7M-0-0	6AGC083318	**
	Terra CE 124 CJ 0-7M-0-0	6AGC082793	**
	Terra CE 124 CC 0-7M-0-0	6AGC082794	6AGC084253
	Terra CE 124 CJT 0-7M-0-0	6AGC084095	**
	Terra CE 124 CCT 0-7M-0-0	6AGC082795	**
Upgradable via software to 180 kW	Terra CE 154 C 0-7M-0-0	**	**
Upgradable via software to 180 kW	Terra CE 154 CJ 0-7M-0-0	**	**
Upgradable via software to 180 kW	Terra CE 154 CC 0-7M-0-0	**	**
Upgradable via software to 180 kW	Terra CE 154 CJT 0-7M-0-0	**	**
Upgradable via software to 180 kW	Terra CE 154 CCT 0-7M-0-0	**	**
	Terra CE 184 C 0-7M-0-0	6AGC080810	**
	Terra CE 184 CJ 0-7M-0-0	6AGC080812	6AGC082857
	Terra CE 184 CC 0-7M-0-0	6AGC080811	6AGC082856
	Terra CE 184 CJT 0-7M-0-0	**	**
	Terra CE 184 CCT 0-7M-0-0	**	**

** Available soon, please contact your local ABB Sales representative for more information

Ordering codes for accessories

Accessories

Cable Management System

Pre-built foundation

Tilt sensor

Cabinet color customization

Cabinet foiling customization

Remotely resettable RCD (AC outlet) - for Terra 24/54/54HV

Payment terminal

CCV payment terminal (available in selected countries and requires Web-Module Payment)

For B/S PayOne

For CardProcess (only for Germany)

Nayax payment terminal (available in selected countries and requires Web-Module Payment)

European version

North American version

Rest of the World version

Power upgrade

30 kW Power Expansion package (Terra 24 to Terra 54)

30 kW Power Expansion package (Terra 94 to Terra 124)

60 kW Power Expansion package (Terra 124 to Terra 184)

90 kW Power Expansion package (Terra 94 to Terra 184)

30 kW Power Upgrade License (Terra 154 to Terra 184)

Web tools

Charger Connect

HMI Customization Tool

Driver Care Tool

Payment Web Tool

OCPP 1.5 API

OCPP 1.6 Connectivity

Order code

6AGC083146

4EPY420074R1

6AGC070923

4EPY420003R1

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6AGC083415

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6AGC064781

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4EPY450059R1

4EPY450060R1

4EPY450053-1

6AGC073898

** Available soon, please contact your local
ABB Sales representative for more information



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