

Overview

The ABB Terra 54/54HV is a powerful 50kW DC Fast charger engineered to deliver efficient and reliable charging for electric vehicle fleets. Dual versions offer sequential charging, enhancing operational flexibility, and the high voltage configurations support faster charging times. The compact Terra 54/54HV is easy to install and ideal for constrained spaces.

Primary Use Cases

- Auto dealerships, for charging available inventory and for customer or public charging
- School electric bus fleets, particularly for long routes or fast midday recharge
- A variety of fleet parking applications where DC charging is needed in minimal space

Key Benefits

- Dual versions offer sequential charging
- Fast charging in a compact, space-saving footprint
- Access control via PIN or RFID (cards by request)
- Credit card reader or payment by mobile app (by request)



ABB Terra 54 Dual CCS1 / CHAdeMO with Credit Card Reader & Cable Retractors (Cable Retractors sold separately)



Managed by



Charge Management Software (CMS)

- User-friendly, integrates with existing systems
- Maximize fleet productivity
- Minimize charging-related energy costs
- Mitigate demand charges with load management

Warranty & Maintenance Options

... backed by an in-house team of service experts

- Standard 2-year (24 month) Warranty included with every InCharge charger (covers parts; restrictions may apply)
- Customizable options to cover parts, labor, uptime SLAs, & more

Configuration	Value
Voltage	480Y / 277 Vac +/- 10%
AC Input Power Connection	3-phase: L1, L2, L3, GND (no neutral)
Frequency	60Hz
Recommended Breaker	80A
SCCR	65kA
Max Current Draw	64A
Power Factor	>0.96
THD (Total Harmonic Distortion)	IEEE 519 Compliant; 5%
Output Parameters	Value
Voltage	54: CCS1 - 200-500 Vdc / CHAdeMO - 50-500Vdc 54HV: CCS1 - 200-920 Vdc
Current - Max	125A
Power - Max	50kW continuous
System Efficiency - Max	95%
Controls & Interface	Value
HMI	7in high brightness full color touchscreen display
Communication	OCPP 1.6J; ISO 15118
Network Connection	GSM/3G/4G modem, 10/100 Base-T Ethernet
RFID	ISO / IEC 14443A/B, ISO / IEC 15393, FeliCa™ 1, NFC reader mode, MiFare, Calypso
Language	English (others available upon request)
Environment	Value
Temperature - Operating	-31°F to 131°F/ -35°C to +55°C *
Temperature - Storage	14°F to 158°F/-35°C to +70°C
Humidity	5% - 95%, non-condensing
Altitude - Operating	8200 ft (2500 m)
Protection - Intrusion	IPA 54, NEMA 3R
Cables & Connectors	Value
Connector Types	CCS1, CHAdeMO
Connector Technology	Segmented
Cable Length	19.6ft (6m)
General	Value
Materials & Finish	Enclosure: all-weather powder-coated stainless steel
Supported Protocols	DIN70212 and ISO15118-2
Dimensions	(D x W x H) 30.7in x 22.2in x 74.8in / 780mm x 565mm x 1900mm
Weight	775lbs / 350kg
Certifications	UL 2202

*Derating characteristics apply at extreme temperatures

ABB Terra 54/54HV

All-in-One 50kW DC Fast charger

Product Code	Product Configuration
A50H-C1-R	Terra 54HV CCS1 (125A, 20ft)
A50H-C1-C	Terra 54HV CCS1 (125A, 20ft), Credit Card Reader
A50H-C1-C-CT	Terra 54HV CCS1 (125A, 20ft), Credit Card Reader, CTEP
A50H-C1CH-R	Terra 54HV CCS1 (125A, 20ft) / CHAdeMO (125A, 20ft)
A50L-C1CH-C	Terra 54 CCS1 (125A, 20ft) / CHAdeMO (125A, 20ft), Credit Card Reader

*Please note, the variants listed are representative and may not be a comprehensive list of available options. Consult with your InCharge Energy sales representative.