Electric Vehicle Infrastructure
Terra 53 multi-standard DC charging station

ABB Terra 53 is the best-selling 50 kW DC charging station in Europe and North America, supporting CCS, CHAdeMO and simultaneous 43 kW AC charging. It complies with all relevant international standards, including the EMC Class B norm mandated for safe user operation on residential, office, retail and petrol station locations.

Terra 53 can deliver its full 50 kW DC continuously, thus supporting increasing EV battery capacities and charger utilisation levels. All chargers come with integrated Connected Services, allowing remote monitoring, diagnostics, software upgrades, and integration with back office applications.

Main features
- 50 kW DC fast charger supporting CCS and CHAdeMO, designed to deliver full output power continuously
- Simultaneous AC charging via optional 22/43 kW cable or 22 kW socket
- IEC 61000 EMC Class B certified for industrial and residential areas (including petrol stations, retail outlets, offices, etc.)
- Future proof connection via open industry standards:
  - Flexible interfacing with added value systems
  - Remote uptime monitoring and assistance
  - Remote updates and upgrades
  - Daylight readable touch screen display
  - Graphic visualization of charging progress
  - RFID/PIN/Remote authorization

Applications
- Highway petrol/service station operators
- Commercial fleet operators
- EV Infrastructure operators and service providers
- EV dealers and importers

Terra 53 has the highest uptime due to redundancy on power and communication. All ABB chargers come with Internet based Connected Services to allow customers to easily connect their chargers to different software systems like back offices, payment platforms or smart grid energy systems. This allows for remote assistance, tailored diagnostic trouble shooting and repair, remote updates and upgrades. A reliable, secure, cost-efficient and future-proof connectivity solution, based on open industry interfaces.
### General specifications

- **Environment**: Indoor / outdoor
- **Operating temperature**
  - Standard: -10 °C to +55 °C
  - Optional: -35 °C to +55 °C
- **Compliance and safety**: CE, RMC, EAC, CHAdeMO 1.0
- **EMC emission**: IEC 61000-6-3 Class B - Residential
- **EMC immunity**: IEC 61000-6-2 Industrial
- **Input AC power connection**: 3P + N + PE
- **Input voltage range**: 400 V AC +/-10 % (50 Hz or 60 Hz)
- **Max. rated input current & power**
  - CJ: 80 A, 55 kVA
  - CT, CJT: 112 A, 77 kVA
  - CJG, CG: 143 A, 98 kVA
- **Power factor (full load)**: > 0.96
- **Efficiency**: 94 % at nominal output power
- **RFID system**: ISO/IEC 14443A/B, ISO/IEC 15393, FeliCa™1, NFC, Mifare Calypso, (option: Legic)
- **Network connection**: GSM / 3G modem, 10/100 Base-T Ethernet
- **Protection**: IP54
- **Dimensions (D x W x H)**: 780 mm x 565 mm x 1900 mm
- **Mass**: 350 kg

### Advantages of connected charging

- Real-time status
- Notifications
- Access management
- Statistics
- Secure payment
- Configuration
- Remote diagnostics

### Possible configurations

Terra 53 is available in the following configurations:

- Terra 53 CT: CCS and 22kW AC socket
- Terra 53 CJ: CCS and CHAdeMO
- Terra 53 CG: CCS and 43 kW AC connector
- Terra 53 CJT: CCS, CHAdeMO and 22 kW AC socket
- Terra 53 CJG: CCS, CHAdeMO and 43 kW AC connector

### Key optional features

- Customized branding possibilities, including customizable user interface
- Integrated payment terminal
- Pin code authorization
- Input power limiting software to avoid expensive grid upgrades
- Web tools for statistics and access management
- Integration with back offices, payment platforms and smart grid energy systems
- Wider temperature range: -35 °C to +55 °C

### Outlet specifications

<table>
<thead>
<tr>
<th></th>
<th>C (default)</th>
<th>J (option)</th>
<th>G (option)</th>
<th>T (option)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Charging standard</strong></td>
<td>CCS</td>
<td>CHAdeMO</td>
<td>Type 2 cable</td>
<td>Type 2 socket</td>
</tr>
<tr>
<td><strong>Maximum output power</strong></td>
<td>50 kW</td>
<td>50 kW</td>
<td>43 kW</td>
<td>22 kW</td>
</tr>
<tr>
<td><strong>Output voltage range</strong></td>
<td>50 - 500 Vdc</td>
<td>50 - 500 Vdc</td>
<td>400 V +/-10 %</td>
<td>400 V +/-10 %</td>
</tr>
<tr>
<td><strong>Maximum output current</strong></td>
<td>125 Adc</td>
<td>125 Adc</td>
<td>63 A</td>
<td>32 A</td>
</tr>
<tr>
<td><strong>Connector/socket type</strong></td>
<td>CCS 2</td>
<td>CHAdeMO / JEV G105</td>
<td>IEC62196 Mode-3 Type-2</td>
<td>IEC62196 Mode-3 Type 2</td>
</tr>
<tr>
<td><strong>Cable length</strong></td>
<td>3.9 m</td>
<td>3.9 m</td>
<td>3.9 m</td>
<td>-</td>
</tr>
</tbody>
</table>

### For more information please contact:

**ABB EV Infrastructure**
Delftweg 65
2289 BA Rijswijk
The Netherlands
Phone: +31 70 307 6200
E-mail: info.evci@nl.abb.com

[abb.com/evcharging](http://abb.com/evcharging)