The Terra DC Wallbox is a compact 24 kW DC fast charger with one or two outlets supporting CCS and CHAdeMO protocols.

Operating the Terra DC Wallbox is easy thanks to a full color, daylight readable touchscreen display. This includes starting and stopping of charge sessions, progress indication during charging, help menus, language selection, and PIN code access control.

As connectivity is the key to successful EV charging installations, the Terra DC Wallbox features ABB Ability Connected Services to enable authentication, payment, monitoring, remote diagnostics and repair, as well as over-the-air updates and upgrades.

Benefits of low power DC solutions
Low power DC is an ideal solution for use cases demanding shorter charging times and higher charging asset utilization than can be provided by AC charging solutions. With a low power DC solution, charging needs can be met in balance with load demands and infrastructure costs.

In AC charging solutions, the EV’s onboard converter is usually the limiting factor on the charging power that can be supplied to the car. With typical onboard ratings ranging from 3 to 11 kW, any additional power the AC charger could provide is left unused. With the Terra DC Wallbox, 24 kW peak DC power is provided directly to the battery, bypassing the limitations of an EV’s onboard converter.

High voltage charging capabilities
As electric vehicles and their use cases diversify, high voltage DC charging has become more important to increase charging power while ensuring as much efficiency, safety and usability in DC charging systems. The Terra DC Wallbox can meet EV battery capabilities up to 920V to enhance power output across a wider range of today’s and tomorrow’s EVs, including both passenger and fleet vehicles.
Main features
• Future proof DC output voltage range from 150 to 920 VDC, supporting EVs today and in the future
• Single or dual outlet: CCS and CHAdeMO
• Daylight readable 7” full color touchscreen display
• Future proof connectivity:
  • OCPP 1.6
  • Capability for remote services
  • Compact design
  • Robust all-weather enclosure for indoor and outdoor use
• RFID reader

Key optional features
• On-screen PIN code authorization
• Input current limiting software to match site requirements
• Web tools for statistics, configuration, access management, remote diagnostics and repair
• Integration with back offices and payment platforms
• Customized branding possibilities

Configurations
The Terra DC Wallbox is available in the following configurations:
• Single outlet CCS-1
• Dual outlet CCS-1 + CHAdeMO

Specifications

<table>
<thead>
<tr>
<th>Electrical</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Input voltage range</td>
<td>(1) 208 - 240 Vac +/- 10% (60Hz)</td>
<td>(2) 480 Vac +/-10% (60 Hz)</td>
</tr>
<tr>
<td>AC Input power connection</td>
<td>(1) 1-phase, 208-240 Vac: L1, L2, GND</td>
<td>(2) 3-phase: 480Y / 277Vac: L1, L2, L3, N, GND</td>
</tr>
<tr>
<td>Max rate input current</td>
<td>(1) 100 A</td>
<td>(2) 32 A</td>
</tr>
<tr>
<td>Current limiting options available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upstream circuit breaker</td>
<td>(1) 125A</td>
<td>(2) 40 A</td>
</tr>
<tr>
<td>Power Factor</td>
<td>&gt;.96</td>
<td></td>
</tr>
<tr>
<td>Current THD</td>
<td>Compliant with IEC 61000-3-12</td>
<td></td>
</tr>
<tr>
<td>DC output power</td>
<td>(1) 19.5kW @208V</td>
<td>(1) 22.5 kW @240V</td>
</tr>
<tr>
<td></td>
<td>(2) 24 kW peak; 22.5kW continuous</td>
<td></td>
</tr>
<tr>
<td>DC output voltage</td>
<td>CCS: 150 - 920 VDC</td>
<td>CHAdeMO: 150 - 500 VDC</td>
</tr>
<tr>
<td>DC output current</td>
<td>60 A</td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>94% at nominal output power</td>
<td></td>
</tr>
</tbody>
</table>

Interface and Control

Charging protocols | CCS-1 | CHAdeMO |
User interface | 7” full color touchscreen display |
RFID system | ISO/IEC14443A/B, ISO/IEC15693, NFC reader mode, Mifare, Calypso |
Network connection | GSM / 3G modem | 10/100 Base-T Ethernet |
Communication | OCPP 1.6 enabled |
Support languages | English (others available on request) |

Environment

Operating temperature | -35 °C to +45 °C (+45 °C to +55 °C with linear derating) |
Protection | IP54, NEMA 3S; indoor and outdoor |
Humidity | < 95%, non-condensing |
Altitude | 2500 m (8200 ft) |

General

Charge cable | 3.5m or 7m (12’ or 23’)
Dimensions (H x W x D) | 770 x 584 x 300 mm | 30.3 x 23 x 11.8 in |
Weight | 60kg / 132 lbs excluding backplate (10 kg / 22 lbs) and cables |
Compliance and safety | UL, FCC |

(1) Single phase configuration
(2) Three phase configuration

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