

ABB Terra AC wallbox



E-Mobility for the Masses with ABB Home EV Charging Solution

With sustainable transport solutions forming a key component of ABB Electrification's Mission to Zero for smart cities, the pioneer in digital technologies unveils the latest extension to its e-mobility portfolio.

As the global leader in sustainable transport solutions ABB has taken another significant step in driving this e-mobility revolution forward over the next decade with the launch of its new Terra AC wallbox.

Electric Vehicle Infrastructure

Terra AC wallbox



The wallbox is designed not only to meet the surging demand for quality yet affordable connected charging in homes and businesses, but also supports the growing generation of renewable energy users who want to harness and manage the consumption of their own power.

The new Terra AC wallbox, is available in up to 22kW variants to ensure compatibility with the electrical system of homes and buildings across the world. It offers a safe, smart and sustainable charging solution which supports ABB Electrification's Mission to Zero for smart cities, a vision for a zero-emission reality for all.



It will be available in select markets, including Europe, over the coming months and available globally by May 2020. The AC wallbox can be ordered via the ABB partner network.

“The Terra AC wallbox represents exactly that; easy to install and use, it will integrate seamlessly with the digital lifestyle of today’s consumers, allowing them to efficiently manage their energy usage and contribute to a greener society for today and future generations.”

The Terra AC wallbox benefits from connectivity that enables configuration and software updates via a dedicated App or remotely via the cloud, providing a lot of flexibility and minimizing the need for onsite intervention and maximizing uptime and efficiency.

Main features:

- Single phase up to 32A/7.4kW
- three phase variant up to 32A/22kW
- various load management options (static/dynamic),
- free@home integration, exact timing t.b.d.
- KNX integration t.b.d. (via TCP/IP)
- Software upgradable via the app,
- Attached cable can be wrapped around the charger,
- control and configuration via the app or the ABB web portal,
- energy meter (1% accuracy over the entire current range) (MID optional)
- Authentication via an app or RFID (RFID optional)
- Optional 4g modem
- OCPP 1.6
- (CE variants) IEC61851-1, IEC 61851-22, IEC61851-3
- (UL variants) UL2231, UL1998, UL2594
- WiFi, BT LE, Ethernet, RS485,
- Variants with CE, UL, cUL, EAC, RCM, RETIE, TR25; different variants for different certifications may apply,
- Type 2 cable, type 2 socket with shutter, type 2 socket (shutter equivalent protection), type 1 cable variants
- ISO15118 prepared

Main characteristics:

- Mode 2 charging
- Overcurrent protection,
- DC leakage protection,
- overvoltage protection,
- TT, TN, IT network,
- Single phase, 3 phase, split phase,
- 1 phase 110V – 220V,
- 3 phase: 380 – 415V; 50Hz- 60Hz ±5%
- Overvoltage CAT III,
- Wi-Fi, ethernet, Bluetooth,
- RS485/P1 or Modbus TCP/IP for connecting a smart meter
- 5 multicolor LED's,
- Operational altitude +4000m
- Operating temperature -35° - +60° C
- Storage temperature -50° - +80° C
- IP67, IK8+ (IK10; to be confirmed)
- Size: 288x180x110mm (excluding charge cables and socket)
- Weight: 2kg (excluding charge cables)
- Design lifetime 10 years
- Mission profile: 16hours charging, 8hrs standby, 5 charge sessions per day

Meanwhile, each charger is equipped with a high accuracy revenue grade energy meter that can be integrated with smart building energy management systems, allowing advanced load management features. This enables home and business owners to adjust the power of assets as needed to maximize charging power and cost efficiency.

High-Value Quality

- Broad range of connectivity options including Wifi, Bluetooth and Ethernet
- Space saving design enables seamless installation on a wall or pedestal, which can accommodate two chargers back-to-back
- With multiple connectors available, Terra AC wallbox is compatible with the majority of EVs
- Dustproof and water resistant in harsh weather conditions enhancing uptime and product lifetime

Future Proof Flexibility

- Future-ready with simple software updated via the user App
- Simplified authentication via either RFID or the App provides flexibility for public-use case applications
- Integrates seamlessly with ABB’s complementary building automation solutions

Safety and Protection

- Evaluated and tested by independent third party to meet the highest standards
- Current limiting protection allows maximum charging power without nuisance tripping
- Integrated ground fault and overvoltage protection protects both user and car