

CT2020 Family

ChargePoint Charging Stations

ChargePoint® charging stations, by Coulomb Technologies, offer municipalities, corporations, fleets and utilities, highly reliable electric vehicle charging that drivers prefer. The easy-to-use stations provide multiple power options, integrating aesthetics and ergonomics with sturdy construction—ideal for residential, commercial and outdoor public applications.

The CT2020 dual charging stations provide two 7.2 kW (208/240 V @ 30 A) Level II charging ports and are designed for public outdoor applications for the North American marketplace. Charging is delivered via standard SAE J1772™ connectors attached to self-retracting¹ cords.

To enhance safety and eliminate energy theft, drivers access and energize the station using a ChargePoint card or contactless credit card. The station's highly visible display guides drivers with instructive messages and can be used to display targeted messages for drivers.

Software Application Services

Set pricing and collect fees, provide 24x7 driver assistance, control access, enable reservations, display advertisements, track usage and monitor the station remotely using the growing suite of ChargePoint cloud-based service plans.

Utility Light¹

Provide drivers with the visibility they need to start and stop charging sessions in areas with poor lighting conditions, with an energy-efficient, photosensor-activated light.

Hassle-Free Cord Management¹

Eliminate the need for drivers to coil up the SAE J1772[™] cord with the CT2025's self-retracting cord management system, ensuring that the cord is always off the ground when not in use.

Smart Card Reader

Provide optional driver billing and custom access control, preventing electricity theft and enhancing safety, with an integrated standards-based RFID reader that accepts ChargePoint cards, contactless credit cards and MIFARE-based transportation cards.

Intelligent Power Control

Ensure power is delivered only when a driver is authorized and the EV connector is properly inserted.

Vacuum Florescent Display with Multiple Language Support

Display instructions and messages in many languages on the bright, easy-to-read display.

Integrated Fault Detection

- + Ground Fault Detection: Integrated ground-fault detection circuitry with autto retry and driver notification.
- * Over-Current Detection: Disconnects power to prevent nuisance breaker trips at service panel. Auto retry and driver notification.
- * Plug-Out Detection: Algorithm disengages power and notifies the driver when a plug is removed.

Over-the-Air Station Upgrade

Keep charging stations current with evolving EV needs by upgrading station firmware remotely over-the-air.

Utility Grade Energy Meter

Provide accurate bi-directional energy measurement with integrated power metering circuitry.

Remote Diagnostics and Control

Minimize the need for on-site maintenance with remote, real-time alarm monitoring and control.

Network Interface

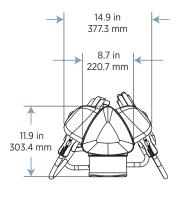
Wireless and cellular network interfaces allow seamless integration with ChargePoint cloud-based application services.

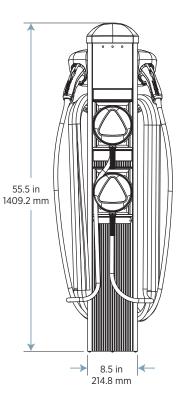
Smart Grid Compatible

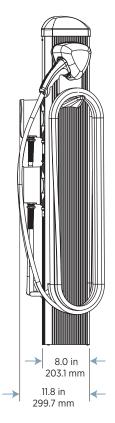
Enable Time-Of-Use (TOU) pricing and demand response by integrating with Advanced Metering Infrastructures (AMIs).



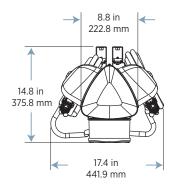
CT2021 Mechanical Drawings

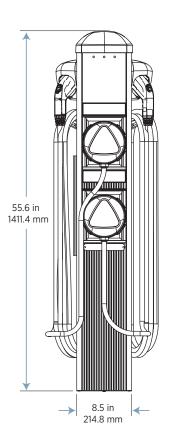


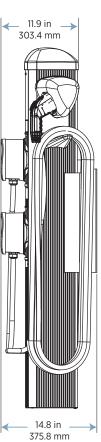




CT2023 Mechanical Drawings









CT2020 Family Specifications

Electrical Input

Input Power	7.2 kW (x 2)	
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Input Voltage	208/240 VAC	
Input Current	30 A (x 2)	
Input Power Connections	Line A1, Line A2, Earth, Line B1, Line B2 (two independent 40 A branch circuits, each providing Line 1 and Line 2, and a single protective Earth conductor)	
Required Service Panel Breaker	40 A double pole breaker (non-GFCI type) on dedicated circuit (x 2)	
Standby Power	7 W typical (not including LED light fixture)	

Electrical Output

Output Charging Power	7.2 kW (x 2)
Output Voltage	240 VAC (x 2)
Output Current	30 A (x 2)
Output Charging Connector	SAE J1772 $^{\rm IM}$ EV Connector on 18' (5.48 m) cord (x 2). On CT2025 only, cord is self-retracting.

Functional Interfaces

Lighting ¹	Photosensor-activated 9 W LED light (equivalent to 50 W incandescent)	
Card Reader	ISO 15693, 14443	
Ground Fault Detection	20 mA CCID with auto retry (15 minute delay, 3 tries)	
Plug-Out Detection	Power terminated per SAE J1772™ specification	
Power Measurement	2% @ 15 minute intervals	
Local Area Network	2.4 GHz 802.15.4 dynamic network	
Wide Area Network	Commercial GPRS or CDMA cellular data network	

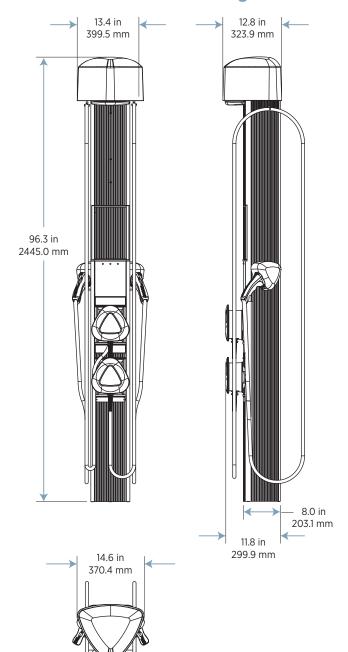
Safety and Operational Ratings

Safety Compliance	UL Listed for USA and cUL certified for Canada; Complies with UL 2594, vUL 2231-1, UL 2231-2, UL 1998, UL 991, NEC Article 625	
Surge Protection	6 kV @ 3,000. In geographic areas subject to frequent thunderstorms, supplemental surge protection is recommended.	
EMC Compliance	FCC Part 15 Class A	
Operating Temperature	-22°F to 122°F (-30°C to +50°C)	
Operating Humidity	95% non-condensing	
Enclosure	Type 3R	
Terminal Block Temperature Rating	100°C (212° F)	
Maximum Charging Stations per 802.15.4 Radio Group	24. Each station must be within 150 feet "line of sight" of one gateway station.	
Wind Loading	Up to 150 mph (241 kph). On the CT2025, includes a 12" x 18" (30 cm x 46 cm) additional signage area.	
Approximate Shipping Weights	CT2021: 45 lbs (20.4 kg) CT2023 45 lbs (20.4 kg) CT2025: 98 lbs (44.5 kg)	

 $^{^{\}mbox{\tiny 1}}$ Included on the CT2025 only.

 $Coulomb\ Technologies, Inc.\ reserves\ the\ right\ to\ alter\ product\ offerings\ and\ specifications\ at\ any\ time\ without\ notice,\ and\ is\ not\ responsible$ for typographical or graphical errors that may appear in this document.

CT2025 Mechanical Drawings



Ordering Information

Specify model number followed by the applicable code(s). The order code sequence is:

Model-Modem-SIM-Card Reader-Warranty

Option		Order Code
Model	Standard Bollard Mount Wall Mount	CT2021 CT2023
	Bollard Mount with Top Lamp and Cable Retractors	CT2025
Modem	Integral GPRS ChargePoint Gateway Modem	-GPRS
	Integral CDMA ChargePoint Gateway Modem	-CDMA
SIM	USA GPRS SIM	-SIM1
	Canada GPRS SIM	-SIM2
Card Reader	Contactless Credit Card Reader	-CCR
Warranty	5 Year Parts Only Extended Warranty	-EW5
	5 Year Parts Only Extended Warranty - Gateway	-EW5GW

Ordering Code Examples

If ordering this	the ordering code would be
Standard Bollard Mount with GPRS Modem	CT2021-GPRS
Bollard Mount with Top Lamp and Cable Retractors, GPRS Mode, Canada GPRS SIM	CT2025-GPRS-SIM2
Standard Bollard Mount with USA GPRS Modem, Contactless Credit Card Reader, and 5 Year Warranty	CT2021-GPRS-SIM1-CCR-EW5GW

For More Information

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