

CP4300 Pedestal Mount

ChargePoint® Networked Charging Station

Installation Guide



IMPORTANT SAFETY INSTRUCTIONS: SAVE THESE INSTRUCTIONS



WARNING:

- 1. Read and follow all warnings and instructions before installing and operating the ChargePoint® Charging Station. Install and operate only as instructed. Failure to do so may lead to death, injury or property damage and will void the Limited Warranty.
- 2. Only use licensed professionals to install your ChargePoint® Charging Station and adhere to all national and local building codes and standards. Before installing the ChargePoint® Charging Station, consult with a licensed contractor, such as a licensed electrician, and use a trained installation expert to ensure compliance with local building and electrical codes and standards, climate conditions, safety standards and all applicable codes and ordinances. Inspect the Charging Station for proper installation before use.
- **3. Always ground the ChargePoint® Charging Station.** Failure to ground the Charging Station can lead to risk of electrocution or fire. The Charging Station must be connected to a grounded, metal, permanent wiring system or an equipment grounding conductor must be run with circuit conductors and connected to the equipment grounding terminal or lead on the Electric Vehicle Supply Equipment (EVSE). Connections to the EVSE must comply with all applicable codes and ordinances.
- **4.** Install the ChargePoint* Charging Station using a ChargePoint-approved method. Failure to install on a surface that can support the full weight of the Charging Station can result in death, personal injury or property damage. Inspect the Charging Station for proper installation before use.
- 5. This charging station is not suitable for use in hazardous locations.
- 6. This device should be supervised when used around children.
- 7. Do not put fingers into the electric vehicle connector.
- 8. Do not use this product if the flexible power cord or EV cable is frayed or has broken insulation or any other signs of damage.
- 9. Do not use this product if the enclosure or the EV connector is broken, cracked, open or shows any other indication of damage.
- 10. Use 75°C or 90°C wire copper conductors only.



Important: Under no circumstances will compliance with the information in this manual relieve the user of their responsibility to comply with all applicable codes or safety standards. This document describes the most commonly used installation and mounting scenarios. If situations arise in which it is not possible to perform an installation following the procedures provided in this document, contact ChargePoint, Inc. **ChargePoint, Inc.** is not responsible for any damage that may result from custom installations that are not described in this document or for any failure to adhere to installation recommendations.

Product Disposal

Follow proper disposal methods according to local authorities. Re-using, recycling or correctly processing obsolete devices is an important contribution to environmental protection. Product materials are recyclable as marked.



No Accuracy Guarantee

Commercially reasonable efforts were made to ensure that the specifications and other information in this manual are accurate and complete at the time of its publication. However, the specifications and other information in this manual are subject to change at any time without prior notice.

Copyright and Trademarks

©2013 – 2020 ChargePoint, Inc. All rights reserved. This material is protected by the copyright laws of the United States and other countries. It may not be modified, reproduced or distributed without the prior, express written consent of ChargePoint, Inc. CHARGEPOINT is a US and European Union-registered trademark and service mark of ChargePoint, Inc. and cannot be used without the prior written consent of ChargePoint.

Symbols Used in This Document

This guide and product use the following symbols:



DANGER: Risk of electric shock.



WARNING: Risk of personal harm or death.



CAUTION: Risk of equipment or property damage.



Important: Crucial step for installation success.



Read the manual for instructions.



Ground/protective earth.



Contents

1	Prepare for Installation	1
	Before You Begin	1
	Tools and Materials	2
	Summary of Delivery Boxes	3
	Installation Sequence	3
2	Build the Mounting Bracket	5
	Check the Box Contents	5
	Build the Station Mounting Bracket	7
3	Build the Pedestal	9
	Check the Box Contents	9
	Prepare the Head Bracket and Bolt Covers	10
	Mount the Pedestal	12
	Prepare the CMK	13
	Build the Pedestal	14
4	Install the Charging Station	. 19
	Check the Box Contents	19
	Install the Grounding Plate	20
	Mount the Charging Station	22
5	Wire the Charging Station	. 25
	Wiring Options	
	Wiring Diagrams	26
	Meeting Power Supply Requirements	30
	Grounding Requirements	30
	Connect the Wiring	
	Close Up the Charging Station	33
6	Complete the Installation	. 35
	Connect the Cable Clamps	35
	Run the Installation Wizard	37
	Pinpoint the Station	
	Start a Test Charging Session	39



Prepare for Installation

This document provides step-by-step instructions for installing a CP4300 Pedestal Mount ChargePoint® Networked Charging Station. Depending on the specific model of CP4300 you are installing, it may be a single port or dual port charging station.



Important: You must be a ChargePoint Certified Installer to perform this installation. If you do not complete certification training, you cannot download the Installation Guide or access the ChargePoint Network to complete pinpointing and station setup.

To complete online training and become a Certified Installer, refer to ChargePoint University at: eu.chargepointuniversity.com.



CAUTION: Do not install the charging station in inclement weather. If you must complete the installation in rain or wind, you must use a weatherproof shelter that covers all boxes and components.

Before You Begin



Important: If the installation site has not been prepared for a pedestal mount charging station (that is, a new or existing concrete pad with newly installed mounting bolts and power cable in place), stop the installation now. Refer to the *CP4000 Site Design Guide* for instructions before continuing the installation.

Ensure that all conditions at the installation site are met:

- The installation site is properly prepared and meets all conditions listed in the *CP4000 Site Design Guide* (a PDF version is available at chargepoint.com/eu/guides).
- The appropriate circuit protection and metering is in place, following local codes and regulations.
- The electrical cable has a maximum diameter of 25 mm. The wire does not exceed 16 mm².
- The electrical cable has been installed and about 2 m of cable is left for a service loop.

- The mounting surface is smooth, stable, plumb and strong. It provides sufficient stability for installing the charging station.
- The installation site is clean.

For a safe and successful installation, be aware of the following considerations:

- If you have not already done so, open Box No. 1 and locate the printed Quick Guide. Review all safety information and heed all warnings listed in the Guide.
- Arrange for two people to complete the installation, due to the weight of the CP4300 and attached cables.
- Do not place liquids, or objects containing liquids, on the charging station.
- Do not place stickers, or other materials that may eliminate sufficient air circulation, on the charging station.
- Only use accessories sold for the charging station by ChargePoint.
- Review the CP4300 Data Sheet (available at chargepoint.com/eu/guides).
- Review the contents of this Installation Guide to familiarise yourself with the contents of each delivery box and the required installation steps. Follow the instructions in this guide and heed all warnings.
- The CP4300 must be approved for operation according to local regulations and conditions.

Tools and Materials

- No. 2 Phillips screwdriver
- No. 2 Pozidriv screwdriver for the breaker terminals
- Set of tamper-resistant Torx drivers: T20, T25, T27, T30, T40
- Set of metric hex drivers, 3 8 mm
- Torque wrenches capable of measuring torques from 1 Nm 175 Nm
- Electrical wire strippers
- Adjustable spanner, adjustable to 16 mm
- Bent-nose pliers with 90° bend, 1.35 mm max, tip diameter and 25 mm min, opening
- Spirit level, 40 cm in length or shorter
- Measuring tape
- Utility knife or Dremel tool
- Electrical tape
- Cable tie wraps
- Wire end ferrules to cover the stripped ends of flexible wires (optional)
- Voltage meter
- Cup for holding small parts
- Damp cloth for wiping down the exterior of the station.
- Floor mat, padded ground covering or similar material to protect station components
- Smartphone or laptop with a QR-code scanner, camera and Internet connection

Summary of Delivery Boxes

Box No.	Assembly Name	Overview of Box Contents
1	CP4300 Charging Station Single Port or Dual Port	 Fully assembled charging station Grounding plate Station key and fasteners Activation sticker Phase rotation labels Power management jumper (dual port stations only) Quick Guide pointing to full online documentation
2	Pedestal Mount Kit	 Pedestal column Installation components Grounding wires Installation kit containing small parts and fasteners
3	Station Mount Kit	Support bracketMounting componentsInstallation kit containing small parts and fasteners
4	Cable Management Kit	 Fully assembled CMK Pedestal mounting components Installation kit containing small parts and fasteners
	Grounding Kit	Grounding components, including fasteners

More detailed lists of the contents of each box are provided later in this guide.

Installation Sequence

Regardless of the specific type of CP4300 pedestal-mount charging station, the high-level installation sequence is the same. Where this Installation Guide refers to two power cables or two station ports, the same instructions apply to single port stations.

- Build the Mounting Bracket (page 5)
- Build the Pedestal (page 9)
- Install the Charging Station (page 19)
- Complete the Installation (page 35)

Build the Mounting Bracket 2

Check the Box Contents

Before unpacking any delivery boxes, place a floor mat, padded ground covering or similar material in an area close to the installation site. When unpacking delivery boxes, place all components on the ground covering and ensure that all components are present and undamaged. Unpack delivery boxes only when you need to, as described in this Installation Guide.



Important: When unpacking the box, **do not** put any components or fasteners directly on the ground.

Open Box No. 3, the Station Mount Kit, and ensure you have all the components.

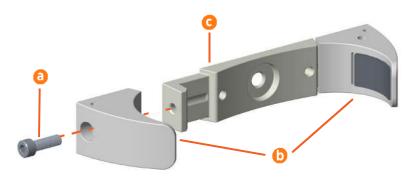
Note: These graphics are not to scale.

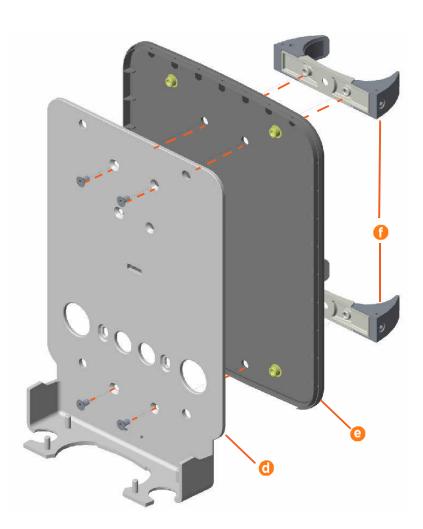


Trim wall (1)	
Strain relief hole plug (1)	
Cable management kit (CMK) clamp base (2)	E. C. F.
CMK clamp end (4)	
Installation kit (1)	Includes: 16-mm M6 flathead hex screws (2) 20-mm M8 flathead Torx screws (4) 14-mm M8 socket head hex screws (4) 25-mm M8 socket head hex screws (4) M8 lock nuts (4)
Grounding kit (1)	Includes: • 635-mm grounding cable • 241-mm grounding cable • 10-mm M8 button head hex screws (3) • M8 star washers (5)

Build the Station Mounting Bracket

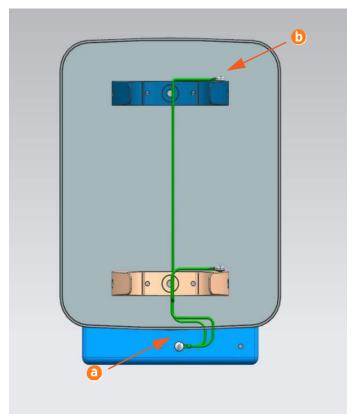
- 1. Place the clamp ends with the drilled holes facing up.
- 2. Use a 6-mm hex driver and two M8 x 25 mm screws (a) to attach the clamp ends (b) to the sides of the CMK clamp base (c). Install the two clamp ends with drilled holes on the right side of the grounding plate as you face the back of the grounding plate with the holes facing up. Do not fully tighten the screws yet.
- **3.** Fit the support bracket (d) into the fascia (e).
- 4. Use a 5-mm hex driver and two 20-mm M8 flathead socket screws to secure the upper clamp assembly to the support bracket. Tighten the screws to 16 Nm.
- 5. Use a 5-mm hex driver and two 20-mm M8 flathead socket screws to secure the lower clamp assembly to the support bracket. Tighten the screws to 16 Nm.
- 6. Use a T40 tamper resistant Torx driver (6-mm hex driver) and two 14-mm M8 socket head cap screws to attach each clamp (f) to the fascia. Tighten the screws to 16 Nm.
- Place the remaining four lock nuts and the strain relief hole plug in a safe place for later use.



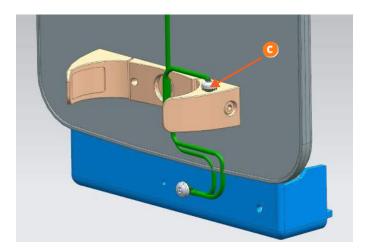


- 8. Use the 10-mm M8 button head hex screw and star washer to connect one end of the 635-mm grounding cable and one end of the 241-mm grounding cable to the M8 hole on the right side of the station mounting bracket (a) as you face the back of the bracket. Tighten the screw to 16 Nm.
- Using the 10-mm M8 screw and star washer, connect the loose end of the 635-mm grounding cable to the upper right CMK clamp end (b). Tighten the screw to 16 Nm.

Note: Use a cable tie to make sure that any excess length of cable is tied up in loops so that the cable is taut and is not visible when looking at the station from the front.



10. Use the 10-mm M8 screw and star washer to connect the end of the 241-mm grounding cable to the lower CMK clamp end (c).



Build the Pedestal 3

Check the Box Contents



Important: When unpacking the box, **do not** put any components or fasteners directly on the ground.

- Gather the four lock nuts and strain relief hole plug remaining from Box #3, the Station Mount Kit.
- 2. Box No. 4, the Cable Management Kit, contains the CMK. Identify the box but do not open it until later in this chapter.
- **3. Ensure Box No. 2, the Pedestal Mount Kit**, has all the components listed below.

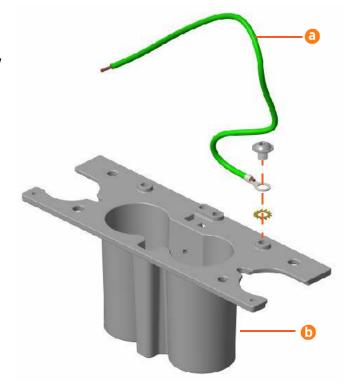
Note: Graphics are not to scale.

Pedestal column (1) with one pre-installed grounding wire	
Front bolt cover (1)	
Rear bolt cover (1)	

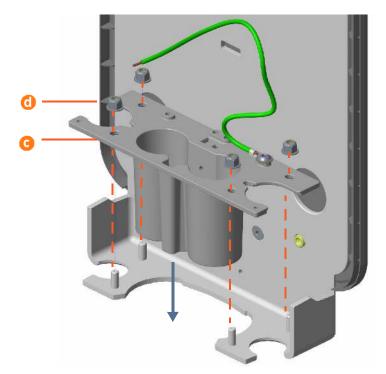
Head bracket (1)	
Installation kit (1)	Contains: Grounding cable, 241 mm (3) Grounding cable, 635 mm (1) 16 mm M6 flathead hex screws (2) 10 mm M8 button head hex screws (10) M8 toothed washers (8)

Prepare the Head Bracket and Bolt Covers

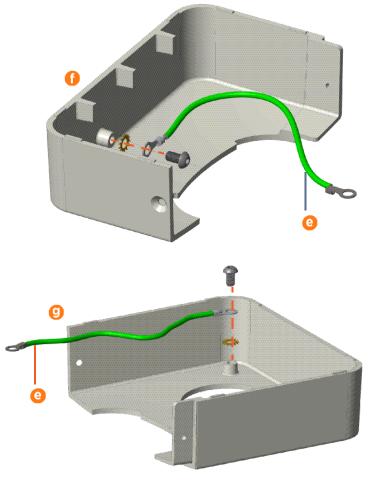
1. Using a 5-mm hex driver, connect the 635-mm grounding cable (a) from the pedestal box to the head bracket (b) with a 10-mm M8 button head cap screw and an M8 toothed washer. Tighten the screw to 16 Nm.



2. Fit the head bracket (c) into place on the support bracket, then use a 13-mm wrench to secure an M8 lock nut (d) onto each bolt. Tighten the nuts to 16 Nm.



3. Using a 5-mm hex driver, connect 241-mm grounding cables (e) to the front bolt cover (f) and rear bolt cover (g) with 10-mm M8 button head cap screws and M8 toothed washers. Tighten the screws to 16 Nm.



Mount the Pedestal



Important: If you are installing the charging station on new concrete, ensure that the concrete is fully cured before you begin. If a plastic or wooden template is still in place from site preparation, remove it before you start the installation.

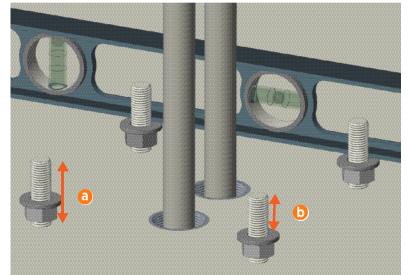
1. Each mounting bolt should already have two M16 nuts and two M16 washers threaded onto it. Remove the top nut and top washer from each mounting bolt. Put them somewhere safe to use in a later step.





Important: Each mounting bolt must extend a maximum of 55 mm above the ground (a). Trim the mounting bolts if required.

- 2. Adjust the remaining nuts and washers so that 35 mm of mounting bolt is exposed above each washer (b). Use a spirit level and adjust the height of the nuts as required to ensure that the four washers are completely level with each other.
- Feed the power cables into the pedestal. (If you are installing a single port charging station, there is only one power cable.)
- 4. Carefully lower the pedestal onto the mounting bolts, feeding the power cables through until they come out the top of the pedestal.



5. **UK installers only**: Mark the power cables where they exit the top of the pedestal, then remove the pedestal temporarily. Strip the cables and install the cable gland and grounding plate. Replace the pedestal and continue with the next step.

- 6. Using the fasteners you removed above, install an M16 washer and M16 nut onto each mounting bolt.
- **7.** Adjust the lower nuts as necessary to ensure the pedestal column is fully level.
- 8. Tighten the nuts to at least 160 Nm.



Important: Ensure the pedestal and its base are fully level by positioning a spirit level at various locations on the pedestal above each bolt. Adjust the nuts beneath the base plate if necessary.



Prepare the CMK

Locate Box No. 4, the Cable Management Kit (CMK).



Important: When unpacking the box, put the CMK onto a padded surface.

1. Remove the CMK from the box and place it carefully on the padded ground covering with its base (a) close to the installation site.

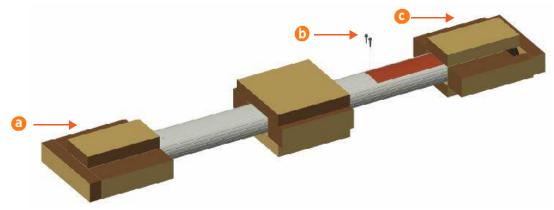
Note: Do not unwrap the ropes.

2. Remove and discard the two 10-mm drive shipping screws (b) from the front face of the CMK.



Important: Do not tilt or carry the assembly with the top end (c) lower than the bottom end. When you remove the delivery screws, the counterweights are free to move in either direction.

3. Remove the packaging.

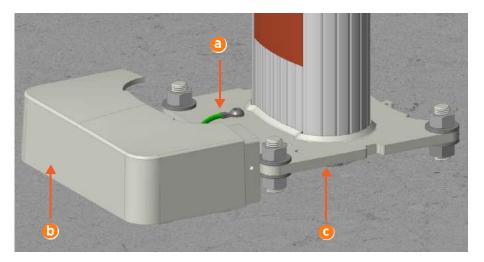


4. Leave the CMK horizontal on the ground to be installed later in this section.

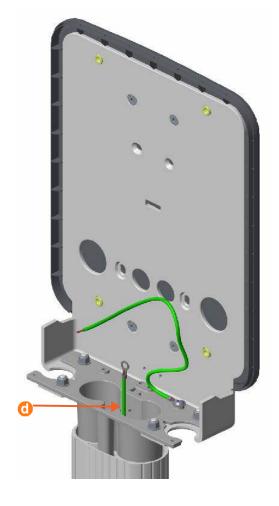
Build the Pedestal

Note: The steps in this section require two people.

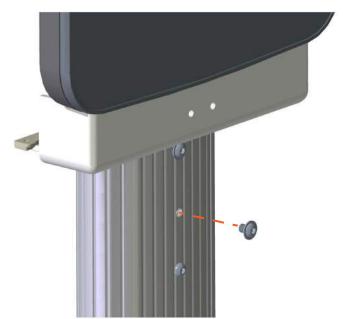
1. Using a 5-mm hex driver, a 10-mm M8 button head cap screw and an M8 toothed washer, connect the grounding cable (a) from the front bolt cover (b) to the farleft hole on the base of the pedestal column (c). Tighten the screw to 16 Nm.



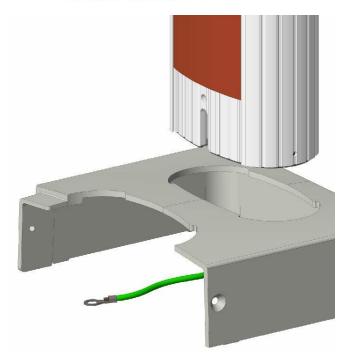
2. Find the pre-installed grounding cable inside the top of the pedestal column (d). Lift the assembled station mounting bracket and carefully guide that grounding cable and the power cables through the opening in the bottom of the head bracket.



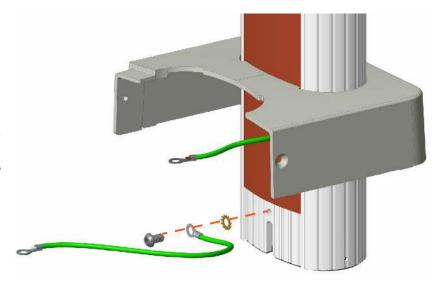
- **3.** Lower the assembled station mounting bracket onto the pedestal, carefully fitting the head bracket down into the column.
- 4. Use a T30 Torx driver and two 10-mm M8 button head cap screws to secure it in place. Tighten the screws to 16 Nm.



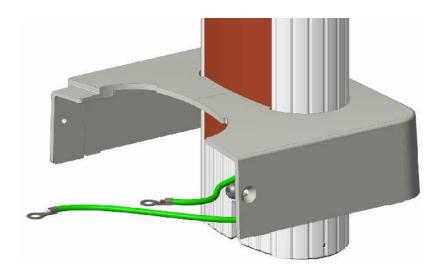
5. Place the rear bolt cover beside the pedestal. Carefully lift the CMK to a vertical position, top up, then gently lower it into the rear bolt cover.



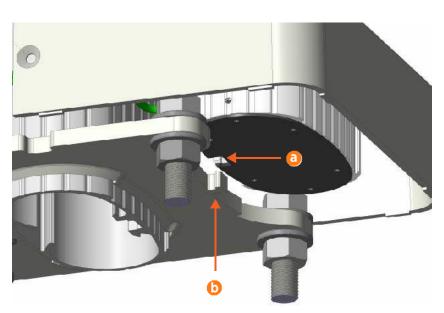
- 6. Carefully, without scratching any components, slide the bolt cover up the CMK.
- 7. Using a 5-mm hex driver, a 10-mm M8 button head cap screw and an M8 toothed washer, connect a 241-mm grounding cable to the CMK. Tighten the screw to 16 Nm.



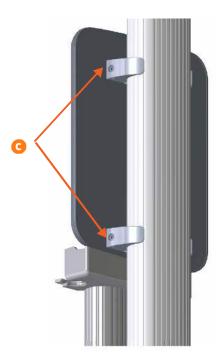
8. Ensure the loose ends of the grounding cables are accessible.



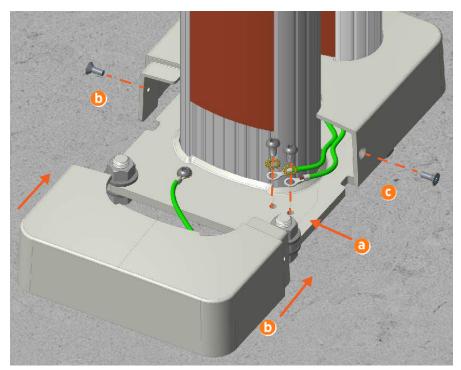
- 9. Carefully move the rear bolt cover and CMK behind the pedestal.
- 10. Lift the CMK and slowly fit it into the pedestal base plate so that its front notch (a) fits over the T-notch in the base plate (b).



11. Fit the upper part of the CMK into the clamps on the back of the station mounting bracket, as shown on the right.

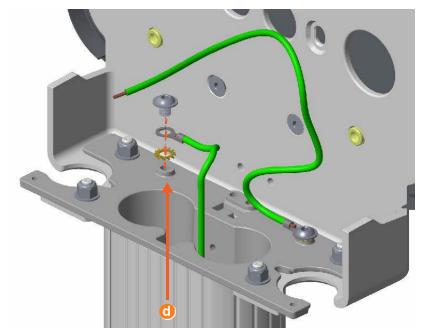


- 12. While one person holds the CMK in place, use a 6-mm hex driver to tighten the ends of the clamps (c) around the column. Tighten the screws to 16 Nm.
- 13. Using a screwdriver with a 5-mm hex driver, a 10-mm M8 button head cap screw and a toothed washer, connect each loose grounding cable to the pedestal base plate (a). Tighten the screws to 16 Nm.
- 14. Fit the front bolt cover (b) around the pedestal and over the base plate.

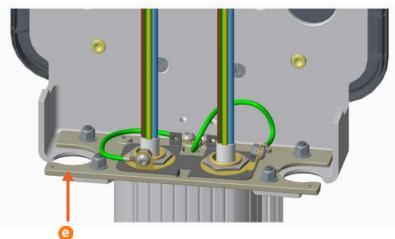


15. Use a T30 tamper-resistant Torx driver and two 16-mm M6 screws to secure the bolt covers together (c). Tighten the screws to 6.5 Nm.

16. Using a driver with a 5-mm hex driver, a 10-mm M8 button head cap screw and a toothed washer, connect the pre-installed grounding cable inside the pedestal column to the head bracket (d). Tighten the screw to 16 Nm.



- 17. UK installers only: Use the grounding cable, M8 button head screws and toothed washers included in the grounding kit box to connect the cable gland to any available hole in the head bracket.
- **18.** If the charging station is a single port station, use the strain relief hole plug to seal the left-side hole (e) in the head bracket.



Install the Charging Station



WARNING: Always de-energise all breakers associated with the charging station before you begin installation. To prevent risk of severe injury through electric shock, ensure that the Miniature Circuit Breaker (MCB) and Residual Current Devices (RCD) cannot be reactivated during installation.

Check the Box Contents



Important: When unpacking the box, do not put components or fasteners directly on the ground.

Note: The front of the charging station is protected by plastic film. Do not remove it until the installation is complete.

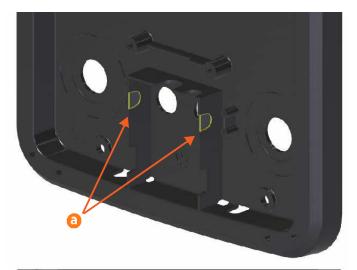
Find Box No. 1, the CP4300 Charging Station, and ensure you have all components (graphics not to scale):

CP4300 Charging Station (1) (Model may be single port or dual port)	
Grounding plate (1)	

Installation kit (1)	Contains: Station key (1) Self-mm M8 pan head Torx screw with washer (4) Plastic wall anchor (4) 25-mm M6 screws (4)
Box of rubber grommets (1)	Contains one large and two small rubber grommets
Power management jumper (1) (Dual port stations only)	

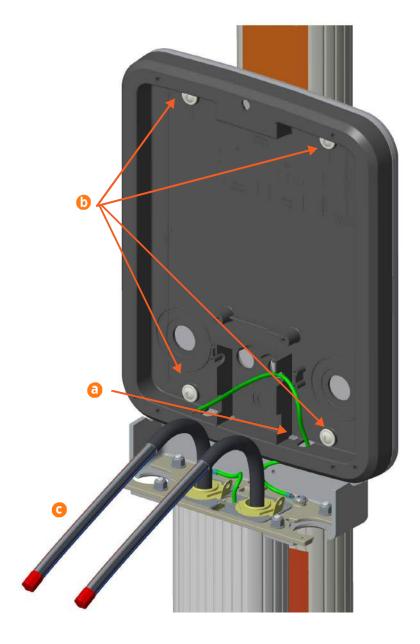
Install the Grounding Plate

- 1. Locate the grounding plate. Using a utility knife, drill or Dremel tool, carve out two notches in the front of the grounding plate (a) and two in the back (b).
- 2. Locate the box of rubber grommets. Fit the grommets into the three holes (one larger, two smaller) in the back of the charging station.





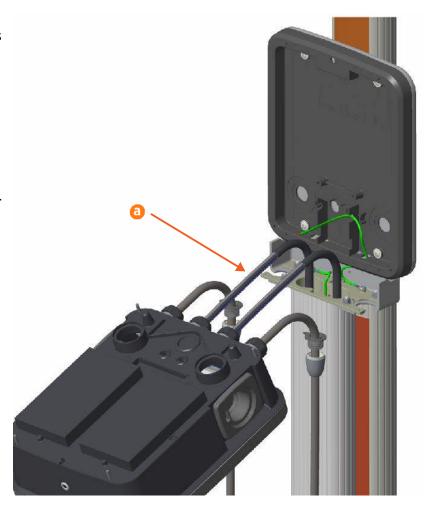
- 3. Feed the loose end of the grounding cable from the head bracket through the hole in the bottom right of the grounding plate (a).
- **4.** Fit the grounding plate onto the station mounting bracket.
- 5. Using four 14-mm M6 socket head screws, secure the grounding plate to the station mounting bracket (b). Tighten the screws to 16.5 Nm.
- 6. Bend the power cables (c) forward approximately 90 degrees.



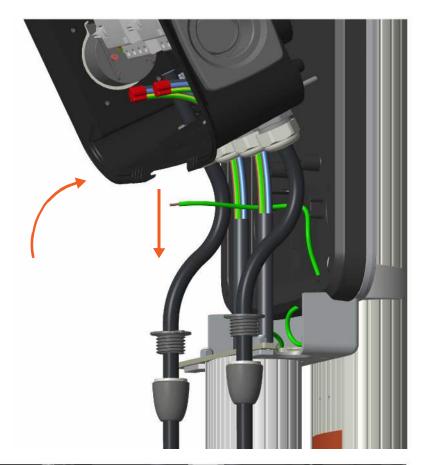
Mount the Charging Station

Note: The steps in this procedure require two people.

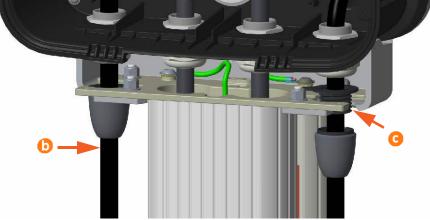
- 1. Gently lay the charging station face up on the padded ground covering. Use the station key to unlock and open the door.
- 2. Use a screwdriver to remove the screw holding the component cover in place.
- 3. Remove the component cover and put it in a safe place for later use.
- **4.** Gently lay the charging station face down on the padded ground covering, with the top of the station facing away from the pedestal.
- 5. Lift the station so that you can guide the power cables into it through the holes in the bottom (a).
- **6.** Guide the loose end of the grounding cable through the back of the station.
- Carefully swing the door open to more easily guide the power cables into place.



8. Rotate the station slowly into a vertical position.



- 9. When the charging station is vertical, hold it close to the grounding plate while fitting the charging cables (b) into the holes in the station mounting bracket (c).
- 10. When the charging cables are in place, seat the charging station into the grounding plate.





Important: Continue to support the charging station until it is secured in place with mounting screws.

11. Install the charging cable glands into the holes in the station mounting bracket.

- **12.** Using a Torx T25 driver and four 25-mm M6 screws, secure the charging station in place. Tighten the screws to 6.5 Nm.
- 13. Connect the loose end of the long grounding wire to PE between the two terminal blocks inside the charging station.



Wire the Charging Station 5

Review the wiring diagram appropriate to the station configuration being installed and complete the recommended configuration.

Wiring Options

In three-phase installations, consider the total quantity of charging stations to be installed at the site. To better balance load across all three phases across the site, ChargePoint provides labels to rotate incoming power across the terminal block.

Note: All stations are delivered with the standard power jumper. Dual port stations also ship with an L1 to L1 power jumper. The standard power jumper is pre-installed on the right RCD and used for standard single port and dual port installations. The L1 to L1 jumper can be swapped in for circuit sharing installations. An L1 to L2 power jumper is also available, sold separately.

For each charging station, follow the directions according to the configuration options shown:

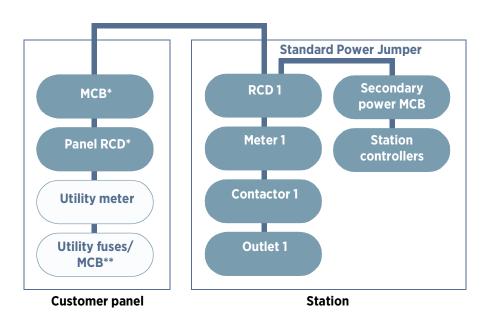
- **Single port charging station**, review the Standard Wiring, Single Port Station. Then proceed to Complete a Standard Wiring Configuration.
- **Dual port stations with two input power cables**, review the Standard Wiring, Dual Port Station. Then proceed to Complete a Standard Wiring Configuration.
- Dual port stations sharing one power cable, review the Circuit-Sharing Wiring (Dual Port Station Only). Then proceed to Complete a Circuit-Sharing Configuration (Dual Port Stations Only). Install the ChargePoint Power Management Jumper to power both ports from a single circuit. The L1 to L1 jumper is included. For phase shifting between charge ports in the station, use the L1 to L2 jumper, sold separately.



Wiring Diagrams

Output	Input Circuits	Panel Breaker Required	Breakers Required		
Single Port Stations	Single Port Stations				
22 kW	1	3-phase 32 A x 1	1		
11 kW	1	3-phase 16 A x 1	1		
7.4 kW	1	1-phase 32 A x 1	1		
3.7 kW	1	1-phase 16 A x 1	1		
Dual Port Stations					
22 kW	2	3-phase 32 A x 2	2		
11 kW	2	3-phase 16 A x 2	2		
7.4 kW	2	1-phase 32 A x 2	2		
3.7 kW	2	1-phase 16 A x 2	2		

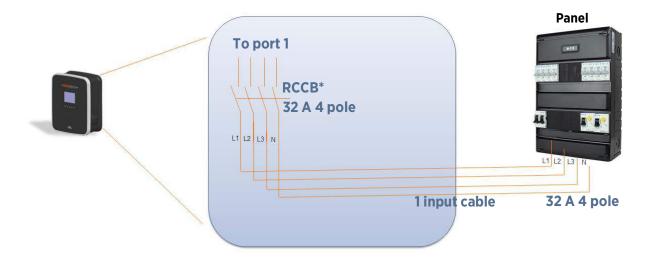
Standard Wiring, Single Port Station



^{*} Panel RCD optional. Install according to all applicable codes and regulations, as needed.

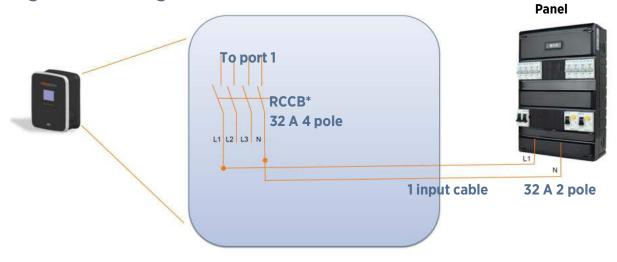
^{**}MCB: Miniature Circuit Breaker

Three Phase Wiring



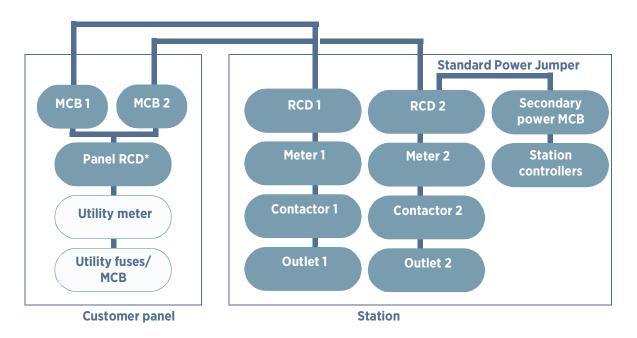
*RCCB: Residual-Current Circuit Breaker with Overcurrent Protection

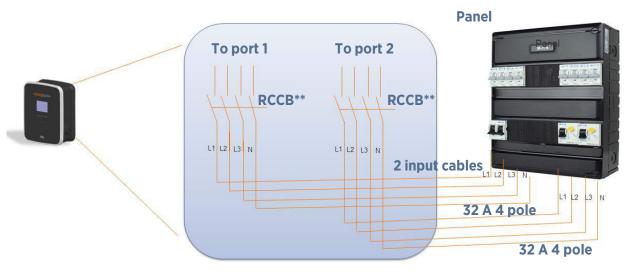
Single Phase Wiring



*RCCB: Residual-Current Circuit Breaker with Overcurrent Protection

Standard Wiring, Dual Port Station





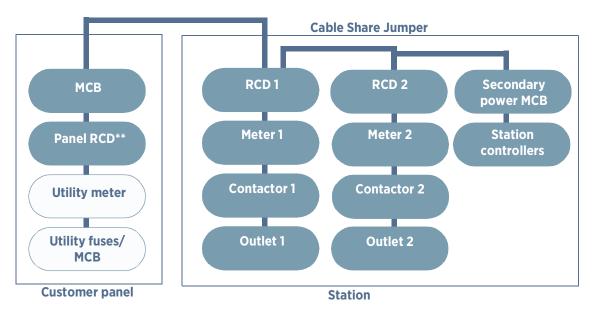
^{*} Panel RCD optional. Install according to all applicable codes and regulations, as needed.

^{**}RCCB: Residual-Current Circuit Breaker with Overcurrent Protection

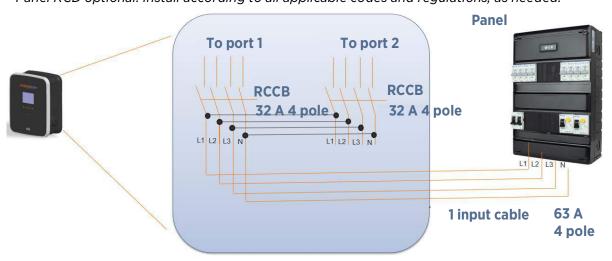
Circuit-Sharing Wiring (Dual Port Station Only)

To power a dual port station using a single power cable, use the Cable Share Jumper. The L1 to L1 Cable Share Jumper is included with the CP4000. The L1 to L2 Cable Share Jumper is an alternative and is sold separately. Circuit sharing is available only for dual port station configurations.

Output per port	Input Circuits	Panel Breaker Required	Breakers Required
22 kW	1	3-phase 63 A x 1	1
11 kW	1	3-phase 32 A x 1	1
7.4 kW	1	1-phase 63 A x 1	1
3.7 kW	1	1-phase 32 A x 1	1



^{*} Panel RCD optional. Install according to all applicable codes and regulations, as needed.



**RCCB: Residual-Current Circuit Breaker with Overcurrent Protection

Meeting Power Supply Requirements

The charging station is designed for connection to and operation on rated voltages of 230 V (phase-neutral) or 400 V (phase-phase) at 50 Hz.

- Comply with all regulatory requirements for low voltage installations according to IEC 60364-1 and IEC 60364-5-52.
- Always connect the device to the protective earth conductor of the power source.
- Reserve a power source exclusively for the charging station and ensure that it complies with HD 60364-7-722:2012.
- Protect the charging station branch circuit in the panel (mains) with a suitable miniature circuit breaker (MCB).

Consult your electricity grid operator regarding requirements for local regulations. Depending on the desired rated power, the installation of the charging station may require registration with and/or approval by your electricity grid operator.

Grounding Requirements

The CP4000 must be connected to a grounded, metal, permanent wiring system. An equipment-grounding conductor must be run with circuit conductors and connected to an equipment-grounding terminal on the CP4000.

A grounding conductor that complies with applicable codes must be grounded to earth at the service equipment or, when supplied by a separate system, at the supply transformer, or may be grounded to an earth electrode. Ensure the grounding conductor complies with all applicable codes.

Connect the Wiring



WARNING: In areas with frequent thunderstorms, add surge protection at the service panel for all circuits.

Use new circuit breakers only. Used breakers can damage equipment and introduce the potential for an electrical fire.

Ensure all power and ground connections, especially those at the breaker and bus bar, are clean and tight. Remove all oxide from all conductors and terminals before connecting the wiring.

Complete a Standard Wiring Configuration

- 1. Remove the electrical tape from the ends of the power cables. If necessary, trim the power cables back, leaving enough cable to create a service loop of about 300 mm.
- 2. Strip the wires 13 mm. If the power cables have flexible wires, fit the stripped ends with wire end ferrules.

- 3. Use a Phillips screwdriver to loosen the lower screws in the terminal blocks.
- 4. Insert the Protective Earth (PE) wire into the PE terminal.
- 5. Tighten the lower screw on the PE terminal to no more than 3 Nm.

Connection Coding	Current-Carrying Conductor	
L1	Phase 1	
L2	Phase 2	
L3	Phase 3	
N	Neutral	
PE	Protective earth	

6. Connect the L1, L2, L3 and N wires to the right-hand terminal block.

Note: Consider which one of the three possible orientations for L1, L2 and L3 you want to use for this particular station. If the site has more than one station, ensure that the stations rotate through the three possible wiring orders to distribute the load evenly.

- 7. Label the terminal block with the correct phase rotation label.
- 8. Tighten the lower screws on the terminals to 3 Nm.

 For dual port stations, repeat this step for the second power cable, using the left-hand terminal block.
- 9. Take a picture of the completed terminal block wiring with labels to submit during pinpointing.



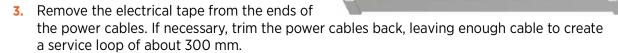
Continue to Close Up the Charging Station.

Complete a Circuit-Sharing Configuration (Dual Port Stations Only)

Note: The L1 to L1 Power Management Jumper is included. For phase shifting, the L1 to L2 jumper can be purchased separately.

To share a single circuit between two ports:

- 1. Remove the standard power jumper (a) from below the right-hand terminal block. Properly recycle this power jumper, following all local regulations.
- 2. Carefully insert the ChargePoint Power Management Jumper (b) so that it spans both terminal blocks.



- 4. Strip the wires 13 mm. If the power cables have flexible wires, fit the stripped ends with wire end ferrules.
- 5. Using a Phillips screwdriver, loosen the lower screws in the terminal blocks.
- 6. Insert the Protective Earth (PE) wire into the PE terminal. Tighten the lower screw on the PE terminal to 3 Nm.

Connection Coding	Current-Carrying Conductor
L1	Phase 1
L2	Phase 2
L3	Phase 3
N	Neutral
PE	Protective earth

7. Connect the L1, L2, L3 and N wires to the right-hand terminal block.

Note: Consider which one of the three possible orientations for L1, L2 and L3 you want to use for this particular station. If the site has more than one station, ensure that the stations rotate through the three possible wiring orders to distribute the load evenly.

- 8. Label the terminal block with the correct phase rotation label.
- 9. Tighten the lower screws on the terminals to no more than 3 Nm.

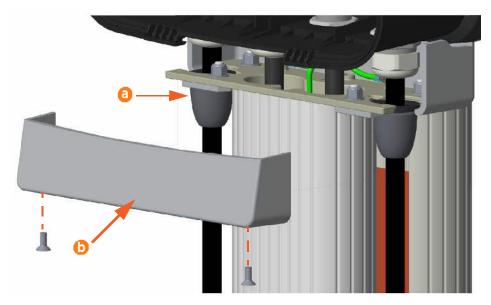


10. Take a picture of the completed terminal block wiring with labels to submit during pinpointing.

Continue to Close Up the Charging Station.

Close Up the Charging Station

- 1. Lift the strain relief connectors (a) and tighten them onto the cable glands so that they fit snugly against the station mounting bracket.
- 2. Align the trim wall (b) so that it covers the bottom of the charging station and station mounting bracket. Use a T27 Torx driver and two M6 screws to secure the trim



wall in place. Tighten the screws to 6.5 Nm.

- **3.** Carefully inspect the charging station to prepare it for closing:
 - Ensure all electrical connections are clean and torqued to specification.
 - Ensure all seals are firmly in place and in proper condition.
 - Wipe inside the charging station with a cloth to remove any debris left by the wires.
 - Collect any tools or fasteners inside the charging station.
 - Ensure all cables are laid properly and the power cables are connected correctly to their terminal blocks.
- 4. Replace the component cover.
- **5.** Switch on the upstream breaker.
- 6. Switch on the **left** RCD (F1).
- **7.** Switch on the **right** RCD (F3).
- 8. Switch on the **middle** MCB (F5).

The charging station establishes a connection to the power source.

- 9. Close the door, ensuring that all wires are clear of the door and that the latch clicks shut. Use the included key to lock the door.
- **10. Remove the key and put it in a safe place.** Once the installation is complete, give the key to the station owner.
- 11. Remove the protective plastic film from the door of the charging station.
- Important: Keep the label on the plastic film. You need its activation information in a later step.
- Important: Do not leave the plastic film on the charging station for more than one day. Exposure to direct sunlight causes the plastic film to mar the front of the charging station.

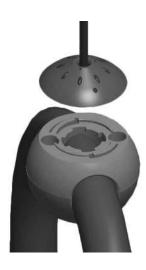
Complete the Installation **6**

Connect the Cable Clamps



Important: Do not unwrap the ropes until they are securely attached to the charging cable.

- 1. Uncoil one charging cable by removing the plastic wrapping and gently extending it all the way out, away from the station. Rotate the charging connector as necessary to remove any twists or kinks in the cable.
- Insert the knot bearing at the end of the retractable rope into the cable clamp. Using bent-nose pliers, carefully turn the knot bearing clockwise by approximately a 1/4 turn. You may need to push down on the knot bearing to turn it.
- **3.** Pull down on the rope and remove the rope from its wrapper. When the rope is unwrapped, it retracts into the top cap of the CMK.
- **4.** Repeat these steps for the other charging cable.
- **5.** Ensure the cables are not kinked at the charging socket and no excessive strain is on the cable or the housing.
- **6.** Check that the charging cable extends and retracts fully and smoothly.
- **7.** Remove the plastic wrapping from the charging connectors and insert them into the holsters.



Troubleshooting

If the charging cable does not extend or retract fully and smoothly, it is likely that its rope has come off the pulley and you must re-position it.

1. Using a 3-mm hex driver, loosen the set screws on each side of the CMK below the top cap.

2. Each rope is attached to a weight that sits on a shelf. Pull the weight shelf up by pulling the rope located in the middle of the top cap.



3. Rotate the top cap so the weight controlling the obstructed rope is facing towards you.



- 4. Inspect the rope to ensure that it is properly aligned onto the pulley.
- 5. Carefully lower the weight back into the retractor.
- **6.** Rotate the top cap back into position and re-tighten the set screws to about 1.1 Nm.



Run the Installation Wizard

When you power on the charging station, the on-screen Installation Wizard runs. The wizard verifies operation of the station and performs basic set-up tasks.



Important: Pinpointing the charging station is a key part of completing the installation, as it helps drivers locate the station quickly. Ensure you pinpoint the station when prompted by the Installation Wizard.

Before running the Installation Wizard, ensure you have:

- The charging station's activation label (located on the plastic film protecting the front of the charging station; a spare label is included in the delivery box)
- Smartphone or laptop with a QR-code scanner, camera and Internet connection
- Your ChargePoint-Certified Installer username and password

The Installation Wizard includes these tasks:

Set a language for the Installation Wizard

Note: This does not permanently affect the station's display language. Choose the language most convenient for you.

- Configure power
- Check for faults
- Test the locking holsters
- Test network connectivity
- Complete the post-installation checklist

Troubleshooting

If the station does not power on and the Installation Wizard does not start, it is likely that the charging station does not have a power source.

- 1. Check the internal RCD(s).
- 2. If power was interrupted in the domestic supply, check the upstream MCB and switch it back on if required.
- 3. If the problem persists, contact ChargePoint Support: chargepoint.com/support.

Pinpoint the Station

For Smartphones With QR Scanning

- 1. Open a QR code scanning app.
- 2. Point the camera at the QR code presented by the Installation Wizard.
 - The app automatically redirects you to the installer pinpointing page.
- **3.** Log in to the ChargePoint mobile site from your smartphone with your installer credentials.
 - Upon login, the MAC address and password of the charging station are automatically displayed.
- 4. Follow the online instructions.

For Smartphones Without QR Scanning

- 1. Using your smartphone, navigate to <u>m.chargepoint.com</u>.
- 2. Log in to the ChargePoint mobile site from your smartphone with your installer credentials.
- **3.** Enter the MAC address and activation password presented by the Installation Wizard, and tap **Next**.
- 4. Follow the online instructions.



Start a Test Charging Session

- 1. Use your ChargePoint RFID card or ChargePoint App to start and stop a charging session.
- 2. Make sure that each plug holster unlocks. Plugging into a real vehicle is not required.

If the station operates correctly and there are no errors, the installation is complete. If the station does not power on or fails to attempt a charging session, de-energise the circuit and confirm that the wiring has been properly connected. If the station has been properly wired but does not operate correctly, you must resolve the error before leaving the site. Contact chargepoint.com/support for assistance.

Warranty Information and Disclaimer

The Warranty you received with your Charging Station is subject to certain exceptions and exclusions. For example, your use of, or modification to, the ChargePoint® Charging Station in a manner in which the ChargePoint® Charging Station is not intended to be used or modified will void the limited warranty. You should review your warranty and become familiar with the terms thereof. Other than any such limited warranty, the ChargePoint products are provided "AS IS", and ChargePoint, Inc. and its distributors expressly disclaim all implied warranties, including any warranty of design, merchantability, fitness for a particular purposes and non-infringement to the maximum extent permitted by law.

Limitation of Liability

CHARGEPOINT IS NOT LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST BUSINESS, LOST DATA, LOSS OF USE OR COST OF COVER INCURRED BY YOU ARISING OUT OF OR RELATED TO YOUR PURCHASE OR USE OF OR INABILITY TO USE THE CHARGING STATION UNDER ANY THEORY OF LIABILITY, WHETHER IN AN ACTION IN CONTRACT, STRICT LIABILITY, TORT (INCLUDING NEGLIGENCE) OR OTHER LEGAL OR EQUITABLE THEORY, EVEN IF CHARGEPOINT KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY EVENT, THE CUMULATIVE LIABILITY OF CHARGEPOINT FOR ALL CLAIMS WHATSOEVER RELATED TO THE CHARGING STATION WILL NOT EXCEED THE PRICE YOU PAID FOR THE CHARGING STATION. THE LIMITATIONS SET FORTH HEREIN ARE INTENDED TO LIMIT THE LIABILITY OF CHARGEPOINT AND WILL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

Declaration of Conformity

Category/Directive	Standard	Scope
General Safety Requirements Directive 2001/95/EC Low Voltage Directive 2014/35/EU	IEC61851-1, (3 rd ed.) IEC 61851-22 Ed. 2.0 IEC61439-7 Ed. 1.0; 2014-02	Electric vehicle conductive charging systems, general requirements Low-voltage switchgear and controlgear assemblies: electric vehicle charging stations
Electromagnetic Compatibility (EMC) Directive 2014/30/EU	EN 301 489-1 EN 301 489-3 EN 301 489-52 IEC 61000-3-X IEC 61000-4-X IEC 61000-6-X	EMC for standard radio and service EMC for short range radio, EMC for Mobile device, EMC for conductive electric vehicle charging station
Radio Equipment Directive (RED) 2014/53/EU	EN 300 330 v2.1.1 EN 301 893 v2.0.7 EN 300 328 v2.1.1 EN 301 511 v12.1.10 EN 301 908-1 v11.1.1	RF testing for WiFi and BT, RF testing for RFID, RF testing for Mobile modem
RoHS Directive 2011/65/EU	EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

See test report 2230436KAU-001a and 2230436KAU-040a See test report 230436KAU-004_Draft



chargepoint.com/support

75-001223-02 r6