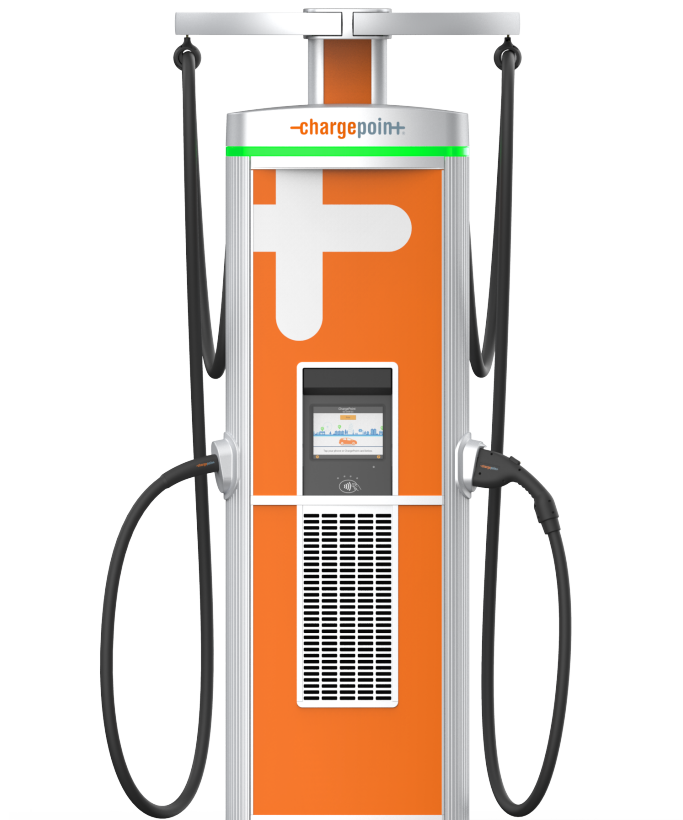


# Express 280

## DC Fast Charging Station

### Operation and Maintenance Guide



# IMPORTANT SAFETY INSTRUCTIONS

## SAVE THESE INSTRUCTIONS

This manual contains important instructions for ChargePoint® products that shall be followed during installation, operation and maintenance of each product.

### WARNING:



1. **Read and follow all warnings and instructions before servicing, installing, or operating the ChargePoint® product.** 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 product and adhere to all national and local building codes and standards.** Before installing the ChargePoint product, 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 product for proper installation before use.
3. **Always ground the ChargePoint product.** A touch current of >3.5 mA AC RMS is possible in case of a fault condition of loss of electrical continuity of the earthing conductor. Failure to ground the product can lead to risk of electric shock. The product must be connected to a grounded, metal, permanent wiring system, or an equipment grounding conductor shall 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 shall comply with all applicable codes and ordinances.
4. **Install the ChargePoint product using a ChargePoint-approved method.** Failure to install on a surface that can support the full weight of the product can result in death, personal injury, or property damage. Inspect the product for proper installation before use.
5. **The product is not suitable for use in Class 1 hazardous locations, such as near flammable, explosive, or combustible vapors or gases.**
6. **Supervise children near this device.**
7. **Do not put fingers into the electric vehicle connector or connector adapter. Do not touch fingers to charging rails.**
8. **Do not use this product if any cable is frayed, has broken insulation, or shows any other signs of damage.**
9. **Do not use this product if the enclosure, the flexible output cable, the vehicle inlet, the electric vehicle connector, or the electric vehicle connector adapter is broken, cracked, open, or shows any other signs of damage. Do not use this product if internal parts are accessible, including wiring.**
10. **Wire and wire terminal information are provided in the ChargePoint product Site Design Guide and Installation Guide.**
11. **Torques for installation of wire terminals are provided in the ChargePoint product Installation Guide.**



12. **The ChargePoint product maximum operating temperature is 50 °C (122 °F).**
13. **Do not use an electric vehicle connector adapter with any charger or EV that is capable of exceeding the adapter's rated voltage of current capacity. Some EVs and EVSE combinations are capable of multiple voltages or limited durations of current overloading designed for normal EVSE-to-EV connections. Use of an electric vehicle connector adapter in these situations could result in unsafe conditions such as fire, burns, or exposure of high voltage.**



**IMPORTANT:** Under no circumstances will compliance with the information in a ChargePoint guide such as this one relieve the user of the responsibility to comply with all applicable codes and safety standards. This document describes approved procedures. If it is not possible to perform the procedures as indicated, contact ChargePoint. ChargePoint is not responsible for any damages that may result from custom installations or procedures not described in this document or that fail to adhere to ChargePoint recommendations.

## Product Disposal

**Applicable to NA** - Do not dispose of as part of unsorted domestic waste. Inquire with local authorities regarding proper disposal. Product materials are recyclable as marked.



**Applicable to EU** - To comply with Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), devices marked with this symbol may not be disposed of as part of unsorted domestic waste inside the European Union. Enquire with local authorities regarding proper disposal. Product materials are recyclable as marked.



## Document Accuracy

The specifications and other information in this document were verified to be accurate and complete at the time of its publication. However, due to ongoing product improvement, this information is subject to change at any time without prior notice. For the latest information, see our documentation online at [ChargePoint Product Reference Documentation](#).

## Copyright and Trademarks

©2013-2025 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 and the ChargePoint logo are trademarks of ChargePoint, Inc., registered in the United States and other countries, and cannot be used without the prior written consent of ChargePoint.

## Symbols

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



**NOTE:** Helpful information to facilitate installation success



Read the manual for instructions



Ground/protective earth

## Illustrations Used in This Document

The illustrations used in this document are for demonstration purposes only and may not be an exact representation of the product. However, unless otherwise specified, the underlying instructions are accurate for the product.

# Contents

IMPORTANT SAFETY INSTRUCTIONS .....	i
<b>1 Introduction .....</b>	<b>1</b>
Additional References .....	1
<b>2 Operation .....</b>	<b>3</b>
ChargePoint Platform Dashboard .....	3
<b>3 Maintenance .....</b>	<b>5</b>
Site Manager's Responsibilities .....	5
Preventive Maintenance .....	6
<b>4 Troubleshooting .....</b>	<b>8</b>
Charging Cable Faults .....	9
Cooling Controller Faults .....	12
CPNK (Touchscreen) Faults .....	16
Dispenser Charge Controller (DCC) Faults .....	20
IO Expander Faults .....	37
Isolation Monitor Faults .....	46
Smart Power Supply Faults .....	50

# Introduction 1

This guide describes how to operate and maintain the ChargePoint® Express 280 DC fast charging platform.

## Additional References

Access documents at [ChargePoint Product Reference Documentation](#).

Document	Content	Primary Audiences
Datasheet	Full station specifications	Site designer, installer, and station owner
Site Design Guide	Civil, mechanical, and electrical guidelines to scope and construct the site	Site designer or engineer of record
Construction Signoff Form	Checklists used by contractors to ensure the site is correctly completed and ready for product installation	Site construction contractor
Installation Guide	Anchoring, wiring, and powering on	Installer
Operation and Maintenance Guide	Operation and preventive maintenance information	Station owner, facility manager, and technician
Service Guide	Component replacement procedures, including optional components	Service technician
Declaration of Conformity	Statement of conformity with directives	Purchasers and public

## Acronyms

Acronym	Description
AUX PS	Auxiliary Power Supply (smart power supply)
CAN (communication)	Controller Area Network
CMK	Cable Management Kit
CPNK	ChargePoint Networking Kit (the touchscreen)
DCC	Dispenser Charge Controller
EEPROM	Electrically Erasable Programmable Read-Only Memory
EV	Electric Vehicle
EVSE	Electric Vehicle Supply Equipment
FRU	Field Replacement Unit
GPIO (bits)	General Purpose Input Output
PM	Power Module

# Operation 2

## ChargePoint Platform Dashboard

You can configure stations, view station and diagnostics information, generate reports, and manage many functions of Express 280 in the ChargePoint Platform. Log in to the ChargePoint Platform at [na.chargepoint.com](https://na.chargepoint.com) using the login credentials created when setting up the station network manager account.

For more information, see [ChargePoint Platform Online help](#).

## Configure Stations

You can configure the following station features:

- Pricing and billing for charging
- Access to stations
- Station messages
- Waitlists (when stations are full)

To view stations and access diagnostic information, see [Stations Overview](#).

## Generate Reports

Access a variety of reporting features in the **Reports** tab:

- Reports by data type (such as Analytics, Financial, Logs)
- Duration slider (by day, week, month, year) below the chart
- Advanced filters (such as station name, organization) at the bottom tab
- Detailed data view when you hover over a report graph

For more information, see [Reports](#).

## Reports on Alerts

You can view the station error codes and alerts from the ChargePoint Platform and export that information to a report.

1. Log in to the ChargePoint Platform.
2. Navigate to **Reports > Alarms**.



3. Choose **Most Recent Only**, **Current Alarms**, **Historical Alarms**, or **All Alarms** from the drop-down menu.
4. Apply filters from the bottom tab.
5. Use the checkboxes on the left to choose specific data.
6. Export as a CSV file by choosing either **Visible Columns** or **All Columns** from the drop-down menu.

# Maintenance 3

This topic provides maintenance checks for site managers and certified technician to ensure the upkeep of the charging stations. Refer to the following topics for more information.

## **DANGER:**

### RISK OF SHOCK



- Before any procedure, disconnect the power. If station is paired, disconnect the power to both paired charging stations.
- Follow local code and site lockout/tagout procedure to de-energize the station.
- Wait for energy to dissipate (approximately five minutes).
- Keep power off until all covers and panels are reinstalled and the work is complete.

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY, LOSS OF LIFE, OR PROPERTY DAMAGE.

## **CAUTION:**

### Warranty Limitation



- If the charging station is not installed, commissioned, or serviced by a ChargePoint Certified Technician using a ChargePoint-approved method, it is excluded from all ChargePoint and other warranties and ChargePoint is not responsible.
- You must be a licensed electrician and complete the training at [chargepoint.com/installers](https://chargepoint.com/installers) to become ChargePoint certified and to access the ChargePoint web or app-based installer tools.

## Site Manager's Responsibilities

The site or facility manager has a few duties for general site maintenance:

- Establish site lockout/tagout procedure per local code and in compliance with the *Service Guide*.
- Maintain an up-to-date copy of the site's as-built and single line diagram (SLD) that includes the naming of all control elements (circuit breakers, fuses, overcurrent devices, and disconnect switches). Documentation to include but not be limited to the localizations, permanent panel schedules, and means or methods required to de-energize the charging station.

- To ensure proper ventilation, make sure nothing is blocking each station's exterior vents, including any snow buildup (remove if present).
- Regularly clean each station's exterior with a damp and lint-free cloth to prevent the accumulation of debris, dust, or dirt. Perform this maintenance more frequently in high pollution environments.

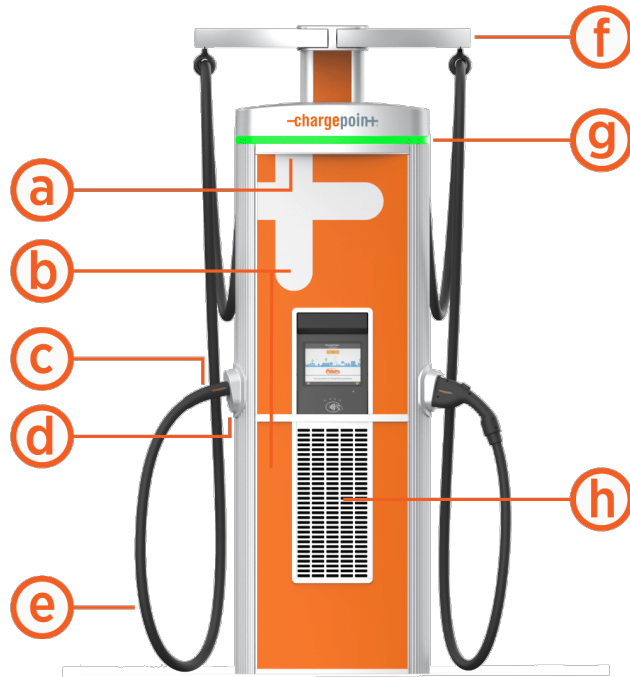


Do not pressure wash the station. Water pressure can damage the station.

- Check each station (including the charging cable and connector) monthly for vandalism and any signs of wear or damage.

## Preventive Maintenance

ChargePoint, or a ChargePoint certified technician, should perform maintenance checks at the intervals listed below.








Part	Every		Action C = Check, R = Replace
	1 year	5 year	
(a) Area light	C		Check if it is functioning.
(b) Vinyls	C		Check if these are vandalized, faded, or peeling off.
(c) Connector	C		Check for the accumulation of debris, dust, or dirt; for excessive wear or any signs of damage; and if the connector contact pins are intact.
(d) Holster	C		
(e) Charging cable	C		Check for cracks or signs of damage.
(f) CMK	C		Check if the charging cable fully extends and retracts.
(g) Status lights	C		Check for proper functioning (see <a href="#">Status light colors</a> )
(h) Airflow vents	C		Check for the accumulation of debris, dust, or dirt.

Refer to the <i>Service Guide</i> to locate the following parts and their service instructions.			
Fans	C		Check for the accumulation of dust.
Coolant (if present)	C	R	Check the level and top up if it is below the minimum level.
Mounting anchors		C	Check for the correct torque.
Bus bar lug nuts		C	

## Status light colors

Refer to the following status light colors and their respective definitions:

Status Light Color		Operating Definitions
	Blue, solid	Charging a vehicle
	Green	Available and ready to charge
	Orange, solid	Online, waiting for a wait-listed vehicle
	Red	Out-of-service or disabled
	White	Starting up

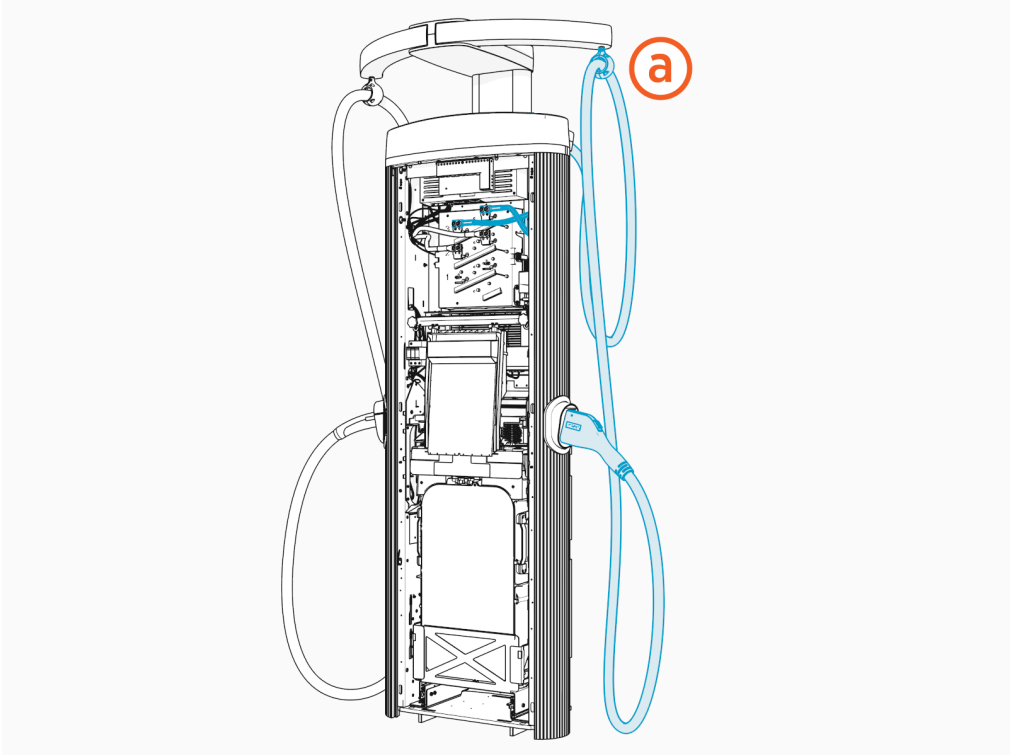
# Troubleshooting 4

This topic provides details to help industrial support engineers, field technicians, and ChargePoint's commissioning team identify and correct Express 280 bugs.

- [Charging cable](#)
- [Cooling controller](#)
- [CPNK / Touchscreen](#)
- [Dispenser Charge Controller \(DCC\)](#)
- [IO Expander](#)
- [Isolation monitor](#)
- [Smart power supply](#)

# Charging Cable Faults

Locate the charging cable (a) on the Express 280 charging station.



## urn:fault:cable:temp-alert

### Error code: Decimal - 901

This fault is declared when cable temperature exceeds the threshold. The fault clears when the temperature goes below the limit.

Category	Fault Source	Fault Type	Critical level
Cable	Cable - temp sensor	Hardware / software	Critical

### Possible Causes

- Software bug
- Cable failure
- Cooling issue

### Troubleshooting

1. Reboot the station. If the fault clears, a valve could have been stuck.
2. Confirm if this fault was first seen after a software update. If yes, then revert to old software version and confirm whether or not the fault clears. If the fault does not occur with the old software version contact the ChargePoint engineering department.

3. Confirm if there are any system cooling related faults on the system. If yes, contact the ChargePoint engineering department for debugging steps.
4. If this does not coincide with any stations changes (hardware/software), then replace the cable to fix the issue.

## urn:fault:cable:temp-warning

### Error code: Decimal - 904

This fault is declared when cable temperature exceeds the threshold. The fault clears when the temperature goes below the limit. Station output is derated.

Category	Fault Source	Fault Type	Critical level
Cable	Cable - temp sensor	Hardware / software	Critical

### Possible Causes

- Software bug
- Cable failure

### Troubleshooting

No action needed.

## urn:fault:cable:proximity-error

### Error code: Decimal -

This fault is declared when cable encounters issues with the proximity signal.

Category	Fault Source	Fault Type	Critical level
Cable	Cable - prox sensor	Hardware	Critical

### Possible Causes

- Connector seating
- Contactor box (Car Comms board)
- Cable failure

### Troubleshooting

1. Confirm if the charging cable (CCS or CHAdeMO, for example) is not damaged and is intact. If you see any issues with the latch or during cable inspection, replace the cable to resolve the issue.
2. If cable is in good condition, confirm if all the connectors are seated on the contact box. If connectors are not seated security, reseal and confirm whether or not the issues go away.
3. If the issue persists, replace contactor box to resolve any issues with car comms board.

4. If the issue persists after contactor box swap, replace the cable to fix the issue.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:cable:isolation-failure

### Error code: Decimal -

This fault is declared when there is an isolation issue on the cable.

Category	Fault Source	Fault Type	Critical level
Cable	Cable	Hardware	Critical

### Possible Causes

Cable insulation failure.

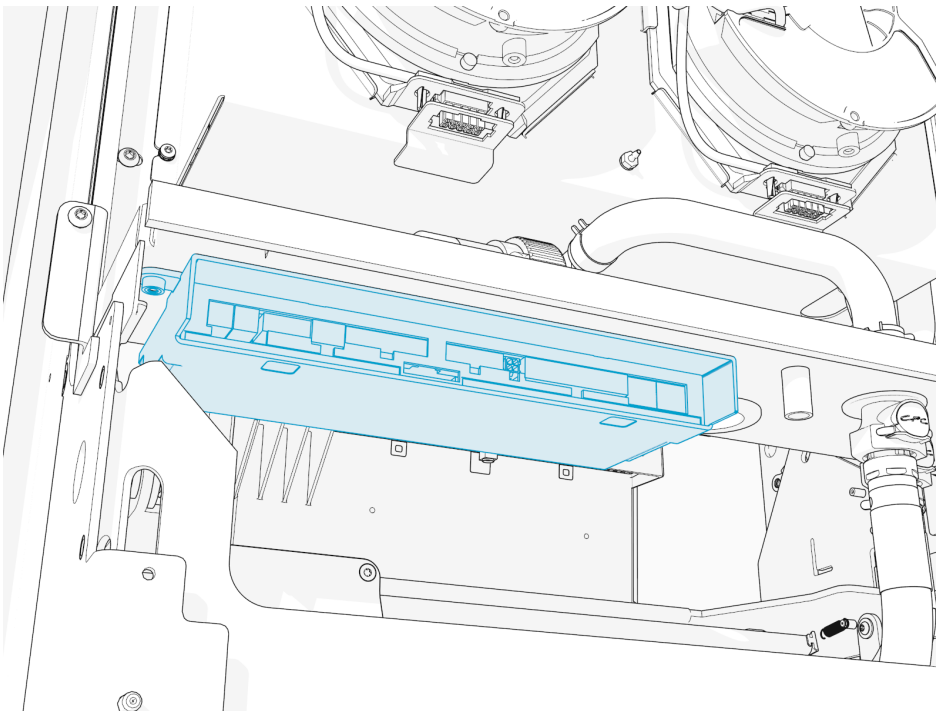
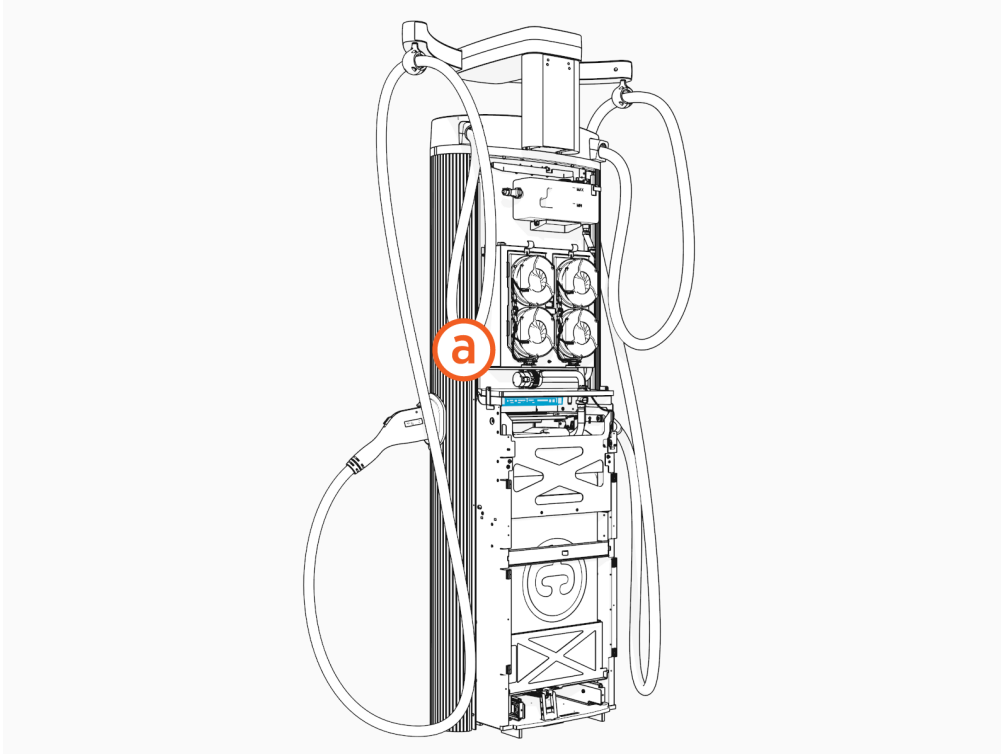
### Troubleshooting

Replace the cable.



## Cooling Controller Faults

Locate the cooling controller (a) near the center on the back side of Express 280 charging stations.



## urn:fault:coolcntl:fan-fault-left-bank

### Error code: Decimal - 1001

This fault is declared when the left fan on the HEX has a locked rotor issue. This will not set any derating on the system. The Power Modules will derate if the temperature raises inside them.

Category	Fault Source	Fault Type	Critical level
Cooling controller	HEX fans	Hardware	Major

#### Possible Causes

- Fan bank failure
- Coolant controller board failure

#### Troubleshooting

1. Replace HEX (or left fan bank if field replaceable unit).  
Contact ChargePoint engineering if the issue persists.

## urn:fault:coolcntl:fan-fault-right-bank

### Error code: Decimal - 1002

This fault is declared when the right fan on the HEX has a locked rotor issue. This will not set any derating on the system. The Power Modules will derate if the temperature increases inside them.

Category	Fault Source	Fault Type	Critical level
Cooling controller	HEX fans	Hardware	Major

#### Possible Causes

- Fan bank failure
- Coolant controller board failure

#### Troubleshooting

1. Replace HEX (or right fan bank if FRU).  
Contact ChargePoint engineering if the issue persists.

## urn:fault:coolcntl:coolant-pump-failed

### Error code: Decimal - 1004

This fault is raised when pump internal faults reports an issue. The system is locked out and set to service.

Category	Fault Source	Fault Type	Critical level
Cooling controller	Pump	Hardware	Critical

## Possible Causes

- Pump failure
- Coolant controller board failure

## Troubleshooting

1. Try to run pump manually. If it runs without triggering a fault, perform DCC reset and monitor for successful sessions.
2. If pump reports failure, then replace the HEX.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:coolctl:coolant-pump-air-lock

### Error code: Decimal - 1065

This fault is raised when air is present inside the coolant loop. This results in the pump failing with air lock fault. This fault may be seen shortly after replacing a Power Module or coolant HEX.

Category	Fault Source	Fault Type	Critical level
Cooling controller	Pump	Hardware	Critical

## Possible Causes

- Air bubbles in coolant loop
- Pump failure
- Leak in the coolant hose

## Troubleshooting

1. Confirm if there was any recent replacement or service done to the dispenser. If yes, then run the pump priming routine to clear any air bubble in the coolant loop. Run it multiple times to clear it.
2. If the issue persists, send out dispatch with HEX. But prior to replacing HEX, try to release the air bubbles by squeezing/massaging the coolant hose in the HEX. Run the pump and see if the issue clears after the following attempt.
3. If the issue persists, replace the HEX.

## urn:fault:coolctl:coolant-low-level

### Error code: Decimal - 1007

This fault is raised when the coolant level in the reservoir is below the low threshold. The system will function normally but the Power Module will derate if the internal temperature is higher.

Category	Fault Source	Fault Type	Critical level
Cooling controller	Pump reservoir	Hardware	Critical

## Possible Causes

- Coolant level low
- Leak in the coolant loop
- Coolant level sensor malfunction

## Troubleshooting

1. Confirm if the coolant level is actually low. Send out dispatch with coolant to top up the dispenser reservoir. Run the pump priming routine to clear any bubbles after filling the the coolant.
2. During the dispatch, investigate any leaks in the coolant loop. Report to ChargePoint Support with clear photos. Replace HEX accordingly.
3. If no leakage is detected and the coolant level is confirmed to be at the maximum level, the issue might be with the coolant level sensor. Replace HEX to resolve the issue.

## urn:fault:coolant:coolant-medium-level-low

### Error code: Decimal - 1008

This warning is raised when coolant level in the reservoir is below the medium threshold.

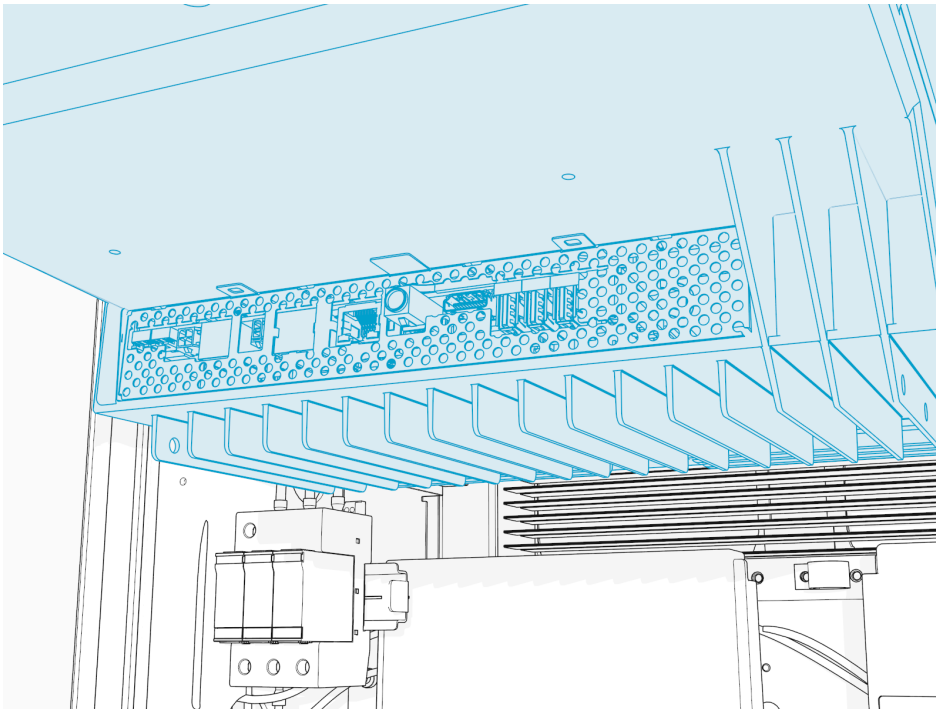
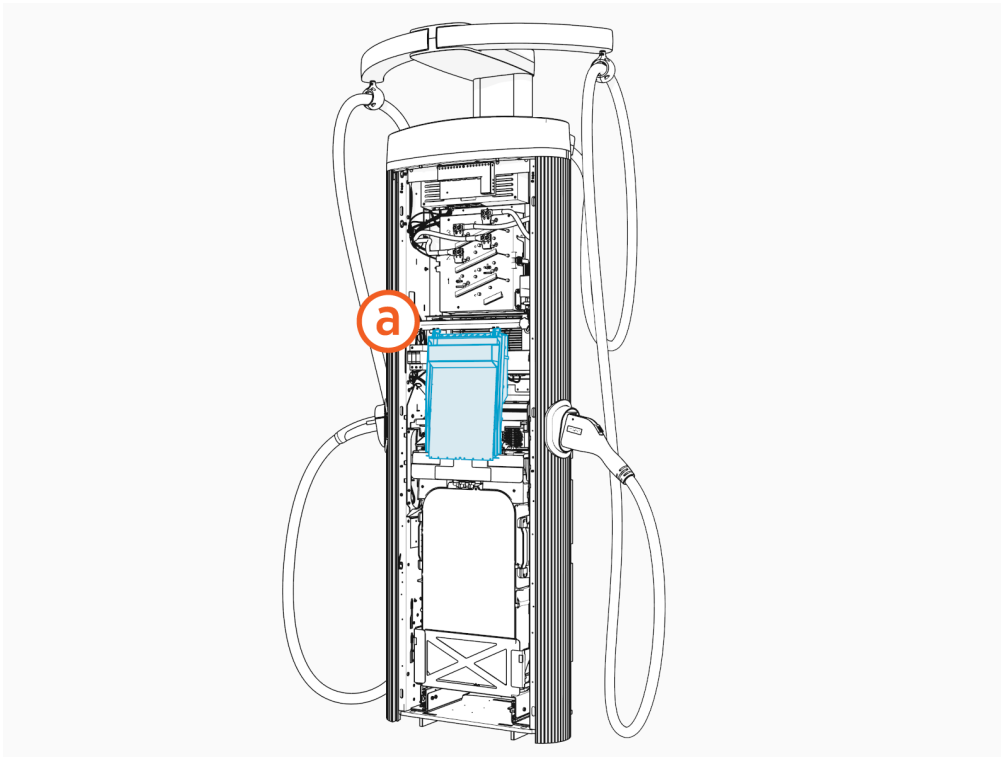
Category	Fault Source	Fault Type	Critical level
Cooling controller	Pump reservoir	Hardware	Warning

## Troubleshooting

No action needed.

## CPNK (Touchscreen) Faults

Locate the CPNK (touchscreen) **(a)** on the Express 280 charging station.



### urn:fault:cpnk:cardreader-update-failed

Card reader firmware update failed.

Category	Fault Source	Fault Type	Critical level
CPNK (touchscreen)	CPNK	Hardware	Minor

## Possible Causes

- Failed card reader hardware/firmware

## Troubleshooting

1. Power cycle the unit to see if it fixes the issue.
2. Replace the CPNK.

## urn:fault:cpnk:cardreader-serial-comms-error

This fault is declared when card reader is unable to communicate with the unit.

Category	Fault Source	Fault Type	Critical level
CPNK (touchscreen)	CPNK	Hardware	Major

## Possible Causes

- Failed card reader hardware/firmware

## Troubleshooting

1. Power cycle the unit to see if it fixes the issue.
2. Replace the CPNK.

## urn:fault:cpnk:evse-unreachable

This fault is declared when EVSE goes unreachable.

Category	Fault Source	Fault Type	Critical level
CPNK (touchscreen)	CPNK	Hardware/software	Minor

## Possible Causes

- Possible network connectivity issues
- Failed SIM card
- Connection lost between CPNK and DCC

## Troubleshooting

1. Power cycle the unit and see if the issue resolves.
2. During dispatch confirm all the connectors/harness on CPNK are seated correctly. If any of it is not firmly connected, then fix the issue to resolve the fault. If it is DCC related, it will usually report Error 31.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:cpnk:gesture-ic-update-failed

Gesture chip firmware update failed.

Category	Fault Source	Fault Type	Critical level
CPNK (touchscreen)	CPNK	Hardware	Minor

## Possible Causes

- Gesture chip hardware/software failure

## Troubleshooting

1. Power cycle the unit to see if it fixes the issue.
2. Replace the CPNK.

## urn:fault:cpnk:gesture-sensor-failed

Gesture chip firmware update failed.

Category	Fault Source	Fault Type	Critical level
CPNK (touchscreen)	CPNK	Hardware	Minor

## Possible Causes

- Gesture chip failure on the CPNK.

## Troubleshooting

1. Power cycle the unit to see if it fixes the issue.
2. Replace the CPNK.

## urn:fault:cpnk:rfid-reader-failed

RFID card reader failure on CPNK (touchscreen).

Category	Fault Source	Fault Type	Critical level
CPNK (touchscreen)	CPNK	Hardware	Minor

## Possible Causes

- RFID reader hardware/software failure

## Troubleshooting

1. Power cycle the unit.
2. Replace the CPNK.

## urn:fault:cpnk:sec-display-failed

This fault is declared when secondary display reports failure. This can be confirmed if secondary display does not bootup and show any light.

Category	Fault Source	Fault Type	Critical level
CPNK (touchscreen)	CPNK	Hardware	Minor

## Possible Causes

- Harness not connected
- Secondary display board failure

## Troubleshooting

1. Confirm if the connector taking power from AUX PS is connected and seated well on the secondary display. If yes, then replace the secondary display.
2. Confirm if USB is connected between the CPNK and the secondary display.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:cpnk:speaker-comms-failed

This fault is declared when communication is lost with CPNK speaker.

Category	Fault Source	Fault Type	Critical level
CPNK (touchscreen)	CPNK	Hardware	Minor

## Possible Causes

- Possible speaker hardware/firmware failure

## Troubleshooting

1. Power cycle the dispenser. No replacement needed.
2. Report to ChargePoint engineering if customer requests repair.

## urn:fault:cpnk:ultrasonic-sensor-comms-failed

This fault is declared when communication is lost with CPNK sensor.

Category	Fault Source	Fault Type	Critical level
CPNK (touchscreen)	CPNK	Hardware	Minor

## Possible Causes

- RFID reader hardware/software failure

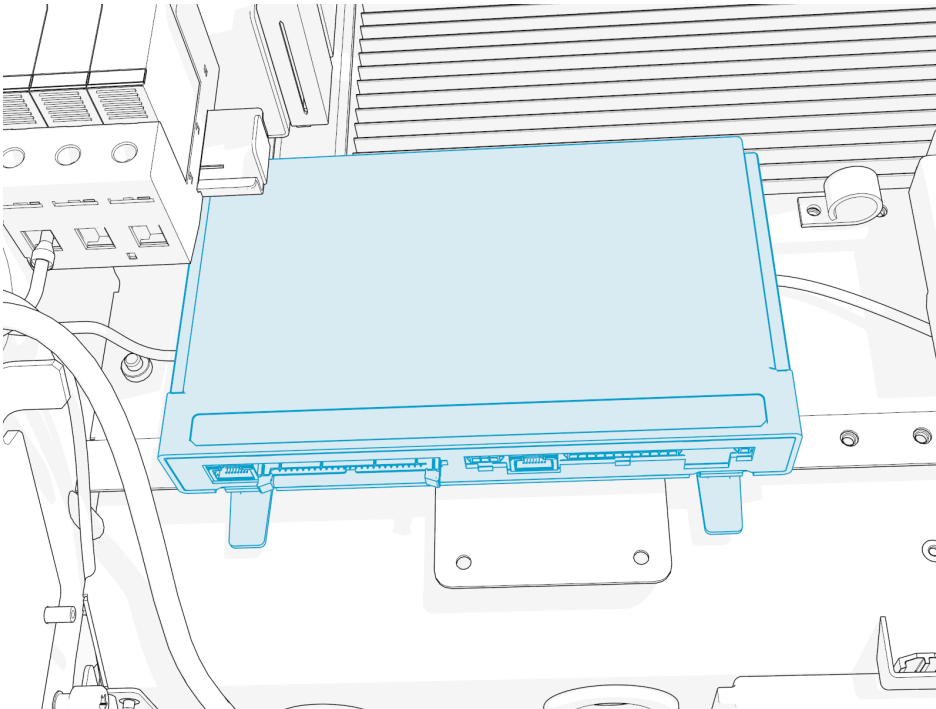
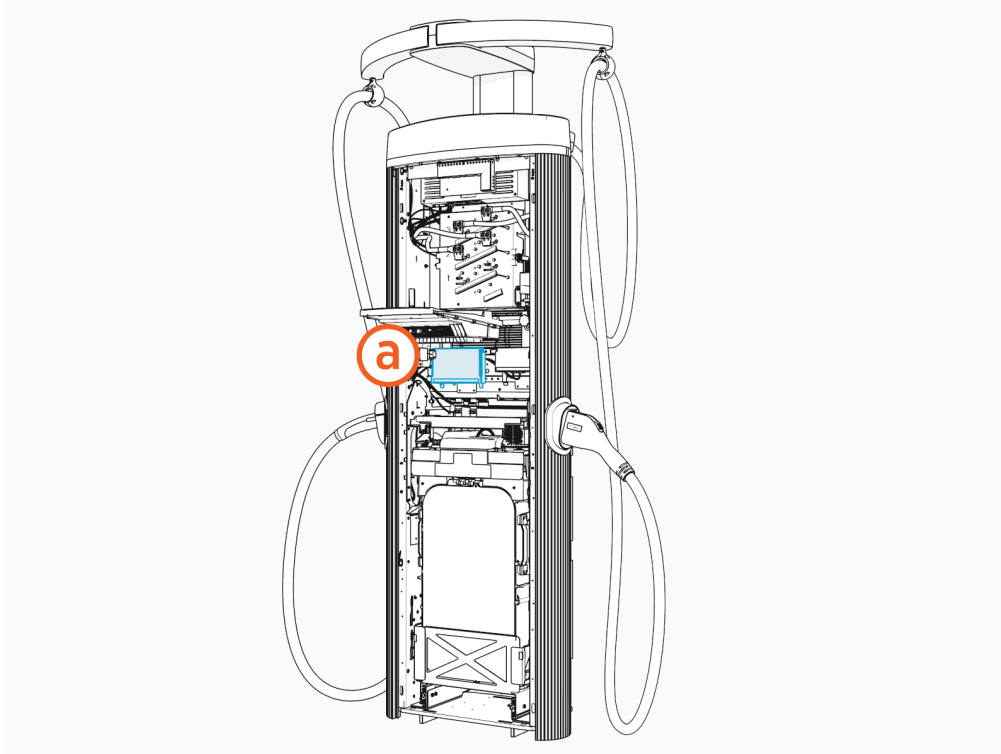
## Troubleshooting

1. Power cycle the dispenser. No replacement needed.
2. Report to ChargePoint engineering if customer requests repair.



## Dispenser Charge Controller (DCC) Faults

Locate the DCC (a) on the Express 280 charging station.



## urn:fault:dcc:power-module-fault

This fault is declared when both Power Modules fault out during a session. Any ongoing session is ended and fault is cleared on the Power Modules (if not persistent).

Category	Fault Source	Fault Type	Critical level
DCC	Power Module	Hardware/software	Critical

### Possible Causes

- EV side issue
- Grid side issue
- Power Module fault

### Troubleshooting

1. Check if the session ended at the end of the session or in the middle of the session. Check if the alarms have an associated "EV ended session" or other EV related fault in the alarms table. If yes, then restart the session and confirm that the Power Modules work correctly.
2. If Power Module faults reported are related to incoming power (AC Undervoltage, AC Overvoltage, AC Overcurrent etc.) and the fault clears after the end of the session, then restart the session to confirm if the Power Modules are still operational. No replacements needed if so.
3. If Power Module faults are persistent and is one of the critical faults, then replace the Power Modules. Contact ChargePoint engineering if replacing both Power Modules.

## urn:fault:dcc:cable-check-short-circuit

This fault is declared when system discovers a short circuit during cable check part of the self-test or session initiation.

Category	Fault Source	Fault Type	Critical level
DCC	Cable	Hardware	Critical

### Possible Causes

- Power Module fault
- DCC failure
- Actual short in the system

### Troubleshooting

1. Confirm if the fault was noted during self-test or during a session start sequence.
2. If the issue occurred during self-test, then:
  - a. Check if there are any Power Module faults reported. If yes, contact ChargePoint engineering for further debugging steps.
  - b. If no Power Module faults were reported, then it could be a short on the DC path. Contact ChargePoint engineering with log files.

3. If this issue was seen during a session, then unplug the vehicle and force a self-test. If the fault reoccurs then continue with below steps.
  - a. Check if there are any Power Module faults. If yes, contact ChargePoint engineering for further debugging steps.
  - b. If no Power Module faults, contact ChargePoint engineering with log files.
4. If self-test does not show any fault, then replug EV and try a new session.

## urn:fault:dcc:invalid-cable-detected

The fault is declared when the CCS or CHAdeMo cable either on a brand new station or after a replacement shows is not detected. The affected port will remain unuseable until the issue is resolved.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

### Possible Causes

- Cable seating issue
- Connector damage
- Contactor box issue
- DCC issue

### Troubleshooting

1. Confirm if the issue is seen on CCS and CHAdeMo. If it is seen on both the cables and coincides with any recent swaps on the system, then replace contactor box to resolve the issue. If the issue persists, then replace DCC.
2. If the issue is noted on a unit that recently had a cable swap, contactor box, and/or DCC swap, then follow these steps:
  - a. Confirm the CCS/CHAdeMo cables are seated correctly. Look for the ribbon cable going in to contactor box and confirm if it is in locked condition and not loosely connected.
  - b. If it is seated correctly, then disconnect and inspect the connector for any connector damage or wire not seated into the connector. Pull test should confirm this.
  - c. If all the connectors are seated correctly and there is no damage to the connector, then replace the contactor box to resolve the issue.
3. If the issue persists, then replace the cable assembly which is faulting out.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:dcc:paired-station-critical-fault

The fault is shown when the system has issue connecting to its paired dispenser. This results in both systems unable to dispense current.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

## Possible Causes

- Pairing cable issue
- Critical fault on the paired dispenser

## Troubleshooting

1. Check if the paired dispenser has any critical or emergency fault on it. If yes, then fix the problems on the paired system to resolve this fault. If not, then continue with the following options.
2. Confirm if this is happening on a brand new install or something failed on a functional unit. If it is new install, please confirm the pairing cables are installed correctly. Both the DC cables and the Ethernet connector between the paired dispensers should be seated and confirm to be good.

Contact ChargePoint engineering if the issue persists.

## urn:fault:dcc:critical-comms-failure

The fault is seen when DCC loses communication with the system. The system will be locked out and non-functional till CAN communication is reestablished.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware	Critical

## Possible Causes

- Connector not seated
- Break in harness
- DCC failure

## Troubleshooting

1. Confirm if all the connectors going to DCC are seated correctly. Disconnect all the connectors and try a pull-test to confirm the connection is secure.
2. Check resistance across Pin 1 and Pin 2 and confirm if we measure 120  $\Omega$ . If not, contact ChargePoint engineering for replacement.
3. If termination resistance measurement is good, then measure continuity between
  - a. Pin 1 on J4 connector (on IO expander) and Pin 1 on J7 connector (on DCC)
  - b. Pin 2 on J4 connector (on IO expander) and Pin 2 on J7 connector (on DCC).

If continuity measurement fails, contact ChargePoint engineering for replacement.

4. If all the above steps pass, then replace DCC to fix the issue.

Contact ChargePoint engineering if the issue persists.

## urn:fault:dcc:invalid-vehicle-comms-sequence

This fault is declared when DCC detects a no-standard session sequence from the EV side.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

## Possible Causes

- EV side issue

## Troubleshooting

1. Confirm if this is related to a specific user/vehicle. If yes, then make sure other EVs are charging well on the same station.
2. If all session (independent of EV) is seeing this fault, contact ChargePoint engineering for further steps.

## urn:fault:dcc:invalid-vehicle-voltage

This fault is declared when DCC detects a voltage that is out of the expected range (depending on the stage of the charging sequence).

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

## Possible Causes

- EV side issue
- Dispenser side issue

## Troubleshooting

1. Confirm if this is happening on a specific vehicle or user. Possible issue with the electric vehicle.
2. If the fault is seen on all session attempts, take logs and contact ChargePoint engineering for next steps.

## urn:fault:dcc:vehicle-shutdown-failure

This fault is declared when DCC detects a voltage which is out of the expected range (depending on the stage of the charging sequence).

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

## Possible Causes

- EV side issue
- Dispenser side issue

## Troubleshooting

1. Confirm if this is happening on a specific vehicle or user. Possible issue with the EV.
2. If the fault is seen on all session attempts, then take logs and contact ChargePoint engineering for next steps.

## urn:fault:dcc:paired-power-connection-error

This is an indication of problem with DC wiring between paired stations. Both systems are non-operational until issue is resolved.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

### Possible Causes

- Paired cable issue

### Troubleshooting

1. Run paired connectivity test on the system. If it passes, then retry session and see if the issue clears. If the connectivity test passes but error persists, then contact ChargePoint engineering for further steps.
2. If the connectivity test fails, the issue with the DC cables between pairing cable. Send out a dispatch to confirm if the pairing cables are landed on the correct bus bars. If not, correct them using *Express 280 Installation Guide*. Confirm if the issue is resolved after correction.
3. If DC cables are landed correctly and the issue persists, then disconnect them and perform isolation resistance test on the DC cables (generally called Meggar test). Report the findings to ChargePoint engineering for further steps.
4. If the Meggar test fails, then replace the DC cables to fix the issue. If the Meggar test passes, then contact ChargePoint engineering for further steps.

## urn:fault:dcc:paired-station-comms-lost

This is an indication of problem with ethernet cable running between the paired stations.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware	Critical

### Possible Causes

- Pairing Ethernet cable

### Troubleshooting

Confirm if the Ethernet cable between both DCCs are connected and seated correctly.

## urn:fault:dcc:paired-station-config-fault

This fault indicates that configuration on paired stations is not accurate.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

## Possible Causes

- Issue with configuration
- DCC failure

## Troubleshooting

1. Resend pairing configuration to both dispensers or specific dispenser that is running into issues. Confirm if the issue is resolved.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:dcc:plug-out-detected

This fault is declared when DCC detects a no-standard session sequence from the EV side.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

## Possible Causes

- EV side issue

## Troubleshooting

1. Confirm if this is related to a specific user/vehicle. If yes, then make sure other EVs are charging well on the same station.
2. If all session (independent of EV) is seeing this fault, then contact ChargePoint engineering for further steps.

## urn:fault:dcc:session-pwr-mgmt-failure

This fault is declared when EVSE stopped with an internal failure.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

## Possible Causes

- Dispenser side issue

## Troubleshooting

Contact ChargePoint engineering.

## urn:fault:dcc:gpio-failure

This fault is declared when DCC is unable to read GPIO bits.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware	Critical

## Possible Causes

- DCC failure

## Troubleshooting

1. Replace DCC to resolve the issue

## urn:fault:dcc:eprom-read-error

This fault is declared when EEPROM parameters are incorrect on DCC or went bad after a software update.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware/software	Critical

## Possible Causes

- Software upgrade issue
- DCC issue

## Troubleshooting

1. Re-flash the software on the dispenser and see if the issue clears.
2. If the fault persists, replace the DCC.

## urn:fault:dcc:temp-sensor-failure

Fault declared when temperature sensor in the DCC reads higher than limit.

Category	Fault Source	Fault Type	Critical level
DCC		Hardware	Minor

## Possible Causes

- Actual thermal issue
- DCC temperature sensor issue

## Troubleshooting

1. Check and confirm if there are any other Overheating or thermal related faults on the system. If yes, then contact ChargePoint engineering for further debugging steps.
2. If system does not show any other fault, then replace DCC.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:dcc:temp-sensor-error

Fault declared when temperature sensor in the DCC reads higher than 70° C.



Category	Fault Source	Fault Type	Critical level
DCC		Hardware	Minor

## Possible Causes

- Actual thermal issue
- DCC temperature sensor issue

## Troubleshooting

1. Check and confirm if there are any other Overheating or thermal related faults on the system. If yes, then contact ChargePoint engineering for further debugging steps.
2. If system does not show any other fault, then replace DCC to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:dcc:current-sensor-not-responding

Fault declared when output current sensor stop communicating with DCC. Ongoing session is stopped and system is locked out for service.

Category	Fault Source	Fault Type	Critical level
DCC	Current sensor	Hardware	Critical

## Possible Causes

- Current sensor is disconnected or pushed out at DCC or chassis
- Current sensor failure
- DCC failure

## Troubleshooting

1. Confirm if CAN1 connector on DCC is plugged in and seated correctly. If yes, then confirm if current sensor is plugged in correctly and seated well.
2. If connector is seated correctly, then replace the current sensor to resolve the issue.
3. If the issue persists, then replace DCC.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:isomon:relay-open-check-failed

This fault is declared when output contactors are unable to OPEN on command.

Category	Fault Source	Fault Type	Critical level
DCC	Contact box	Hardware	Critical

## Possible Causes

Contact box issue.

## Troubleshooting

1. Force a self-test and see if the issue resolves.
2. Replace contactor box.

### urn:fault:isomon:relay-close-check-failed

This fault is declared when output contactors are unable to CLOSE on command.

Category	Fault Source	Fault Type	Critical level
DCC	Contactor box	Hardware	Critical

#### Possible Causes

Contactor box issue.

## Troubleshooting

1. Force a self-test and see if the issue resolves.
2. Replace contactor box.

### urn:fault:isomon:relay-not-closed-check-failed

This fault is declared when output contactors are unable to CLOSE on command.

Category	Fault Source	Fault Type	Critical level
DCC	Contactor box	Hardware	Critical

#### Possible Causes

Contactor box issue.

## Troubleshooting

1. Force a self-test and see if the issue resolves.
2. Replace contactor box.

### urn:fault:isomon:relays-open-all-check-failed

This fault is declared when output contactors are unable to OPEN on command.

Category	Fault Source	Fault Type	Critical level
DCC	Contactor box	Hardware	Critical

#### Possible Causes

Contactor box issue.

## Troubleshooting

1. Force a self-test and see if the issue resolves.
2. Replace contactor box.

### urn:fault:isomon:system-voltage-check-failed

This is declared when system is unable to see the expected voltage, indicating a break in the DC path.

Category	Fault Source	Fault Type	Critical level
DCC	Contactor box	Hardware	Critical

## Possible Causes

- Contactor box issue
- Power Module issue

## Troubleshooting

1. Confirm if there are any Power Module related issue on the system. If yes, then replace the Power Module and confirm if the issue is resolved.
2. If no, force a self-test and see if it resolves the issue.  
Contact ChargePoint engineering if the issue persists.

### urn:fault:isomon:riso-state-check-failed

This is declared when system is unable to measure isolation resistance.

Category	Fault Source	Fault Type	Critical level
DCC	Contactor box	Hardware	Critical

## Possible Causes

Contactor box issue.

## Troubleshooting

1. Replace contactor box to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

### urn:fault:dcc:cool-ctrl-can-comms-failed

This fault is declared when coolant controller board loses CAN communication with DCC.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-CCB	Hardware	Critical

## Possible Causes

- Connector not seated
- Break in harness
- Coolant board failure
- DCC failure

## Troubleshooting

1. Confirm if CAN communication connector is seated correctly and pushed in.
2. Measure continuity between pins 1 and 2 on J4 connector at Coolant controller board. If it measures a short, then contact ChargePoint engineering for harness swap.
3. Measure resistance between pins 1 and 2 on J4 connector at Coolant controller board. Reading 120  $\Omega$  indicates a good termination resistance.

Contact ChargePoint engineering if the issue persists.

## urn:fault:coolcntl:cant-read-pmcc-config

This fault is declared when PMCC configuration is not accurate on DCC.

Category	Fault Source	Fault Type	Critical level
DCC	DCC	Hardware/software	Critical

## Possible Causes

- DCC configuration issue

## Troubleshooting

- Reset DCC and see if the issue is resolved.

Contact ChargePoint engineering if the issue persists.

## urn:fault:coolcntl:fan-speed-25-fan-off-check-failed

This fault is declared when Fan Speed was set to 25% but did not respond to OFF command later.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-HEX	Hardware/software	Critical

## Possible Causes

- Coolant controller issue
- Fan tech failure

## Troubleshooting

1. Confirm if there is any issue with the connectors at the fan - if it is seated correctly or for any obvious damage. If any issue found, then replace the HEX to resolve the issue.

2. If no damage found, then reboot DCC and run the fans manually to see if it responds. If yes, then monitor more sessions for successful charging. If not, then replace HEX to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:coolcntl:fan-speed-25-fan-off-speed-mismatch

This fault is declared when RPM feedback does not match the speed request of 25%.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-HEX	Hardware/software	Critical

### Possible Causes

- Fan connector seating issue
- Fan feedback wire issue
- Fan internal failure

### Troubleshooting

1. Confirm if there is any issue with the connectors at the fan - if it is seated correctly or for any obvious damage. If any issue found, then replace the HEX to resolve the issue.
2. If no damage found, then reboot DCC and run the fans manually to see if RPM feedback matches the speed request. If yes, then monitor more sessions for successful charging. If not, then replace HEX to resolve the issue.
3. Contact ChargePoint engineering for further debugging steps.

## urn:fault:coolcntl:fan-speed-25-fan-off-speed-mismatch

This fault is declared when RPM feedback does not match the speed request of 25%.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-HEX	Hardware/software	Critical

### Possible Causes

- Fan connector seating issue
- Fan feedback wire issue
- Fan internal failure

### Troubleshooting

1. Confirm if there is any issue with the connectors at the fan - if it is seated correctly or for any obvious damage. If any issue found, then replace the HEX to resolve the issue.
2. If no damage found, then reboot DCC and run the fans manually to see if RPM feedback matches the speed request. If yes, then monitor more sessions for successful charging. If not, then replace HEX to resolve the issue.
3. Contact ChargePoint engineering for further debugging steps.

## urn:fault:coolcntl:fan-speed-100-fan-off-check-failed

This fault is declared when Fan Speed was set to 100% but did not respond to OFF command later.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-HEX	Hardware/software	Critical

### Possible Causes

- Coolant controller issue
- Fan tech failure

### Troubleshooting

1. Confirm if there is any issue with the connectors at the fan - if it is seated correctly or for any obvious damage. If any issue found, then replace the HEX to resolve the issue.
2. If no damage found, then reboot DCC and run the fans manually to see if it responds. If yes, then monitor more sessions for successful charging. If not, then replace HEX to resolve the issue.
3. Contact ChargePoint engineering for further debugging steps.

## urn:fault:coolcntl:fan-speed-100-fan-speed-mismatch

This fault is declared when RPM feedback does not match the speed request of 100%.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-HEX	Hardware/software	Critical

### Possible Causes

- Fan connector seating issue
- Fan feedback wire issue
- Fan internal failure

### Troubleshooting

1. Confirm if there is any issue with the connectors at the fan - if it is seated correctly or for any obvious damage. If any issue found, then replace the HEX to resolve the issue.
2. If no damage found, then reboot DCC and run the fans manually to see if RPM feedback matches the speed request. If yes, then monitor more sessions for successful charging. If not, then replace HEX to resolve the issue.
3. Contact ChargePoint engineering for further debugging steps .

## urn:fault:dcc:station-iocan-comms-failed

This fault is declared when IO Expander board loses CAN communication with DCC.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-IOEXP	Hardware	Critical

## Possible Causes

- Connector not seated
- Break in harness
- IO expander failure
- DCC failure

## Troubleshooting

1. Confirm if CAN communication connector is seated correctly and pushed in on Smart Power Supply.
2. Measure continuity between pins 1 and 2 on J4 connector at IO Expander. If it measures a short, then contact ChargePoint engineering for harness swap.
3. Measure resistance between pins 1 and 2 on J4 connector at Coolant controller board. Reading 120  $\Omega$  indicates a good termination resistance.
4. Contact ChargePoint engineering for further debugging steps.

## urn:fault:dcc:smart-pwr-can-comms-failed

This fault is declared when SMART power supply loses CAN communication with DCC.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-SMARTPS	Hardware	Critical

## Possible Causes

- Connector not seated
- Break in harness
- Smart PS failure
- DCC failure

## Troubleshooting

1. Confirm if CAN communication connector is seated correctly and pushed in on Smart Power Supply.
  2. Measure continuity between pins 1 and 2 on J404 connector going to SMART Power Supply. If it measures a short, then contact engineering for harness swap.
  3. Measure resistance between pins 1 and 2 on J404 connector at SMART Power Supply. Reading 120  $\Omega$  indicates a good termination resistance.
- Contact ChargePoint engineering if the issue persists.

## urn:fault:smartpwr:not-all-output-channels-turned-on

This fault is declared when DCC is unable to read expected voltages on all channels of the smart power supply.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-SMARTPS	Hardware	Critical

## Possible Causes

- Smart PS failure
- DCC failure

## Troubleshooting

1. Replace Smart power supply to resolve the issue.
2. If the issue persists, replace DCC.

Contact ChargePoint engineering if the issue persists.

## urn:fault:dcc:no-power-modules-detected

This fault is declared when Power Modules are not able to communicate with DCC.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-Power Modules	Hardware	Critical

## Possible Causes

- Data connector issue
- Power Module issue

## Troubleshooting

1. Check if any Power Module faults are reported on NOS. If any critical fault, then replace the Power Modules.
2. If no fault, then send dispatch to confirm the seating of the Power Modules in the dispenser. Confirm mod-mech is making full contact with the Power Module data connector. Please get all photos from the dispatch.

Contact ChargePoint engineering if the issue persists.

## urn:fault:dcc:not-all-power-modules-active-available

This fault is declared when Power Modules are not able to communicate with DCC.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-Power Modules	Hardware	Critical

## Possible Causes

- Data connector issue
- Power Module issue

## Troubleshooting

1. Confirm if the issue is reported by one module or both modules.
2. Check if any Power Module faults are reported on NOS. If any critical fault, then replace the Power Modules.



3. If no fault, then send dispatch to confirm the seating of the Power Modules in the dispenser. Confirm mod-mech is making full contact with the Power Module data connector. Please get all photos from the dispatch.

Contact ChargePoint engineering if the issue persists.

## urn:fault:dcc:voltage-over-50v-on-pm-output-standalone

This fault is declared when Power Modules are not able to communicate with DCC.

Category	Fault Source	Fault Type	Critical level
DCC	DCC-Power Modules	Hardware	Critical

### Possible Causes

- Wrong DC wiring on paired bus

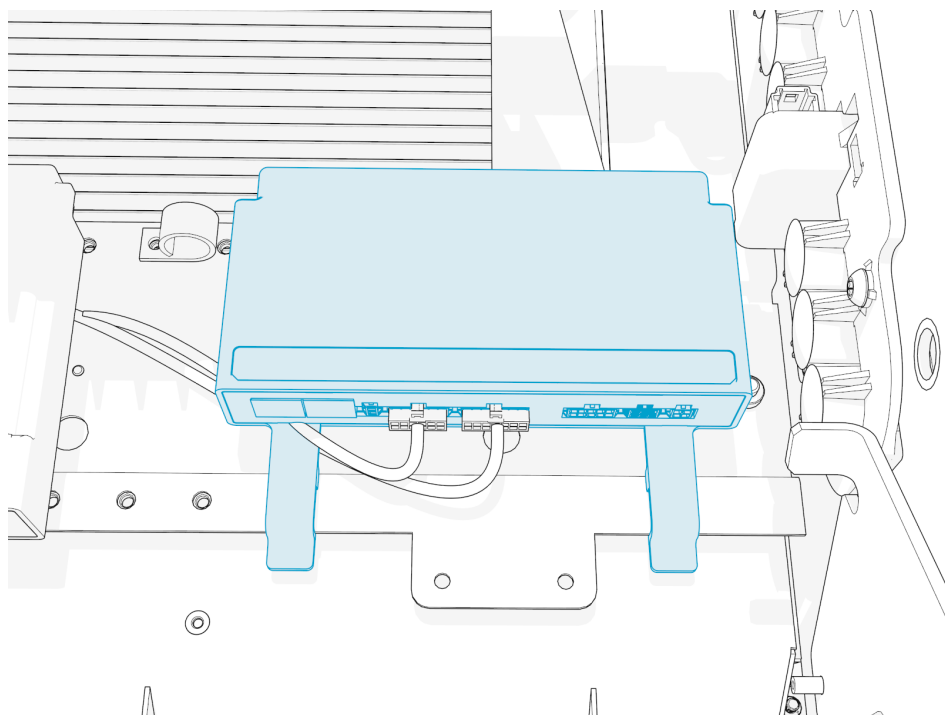
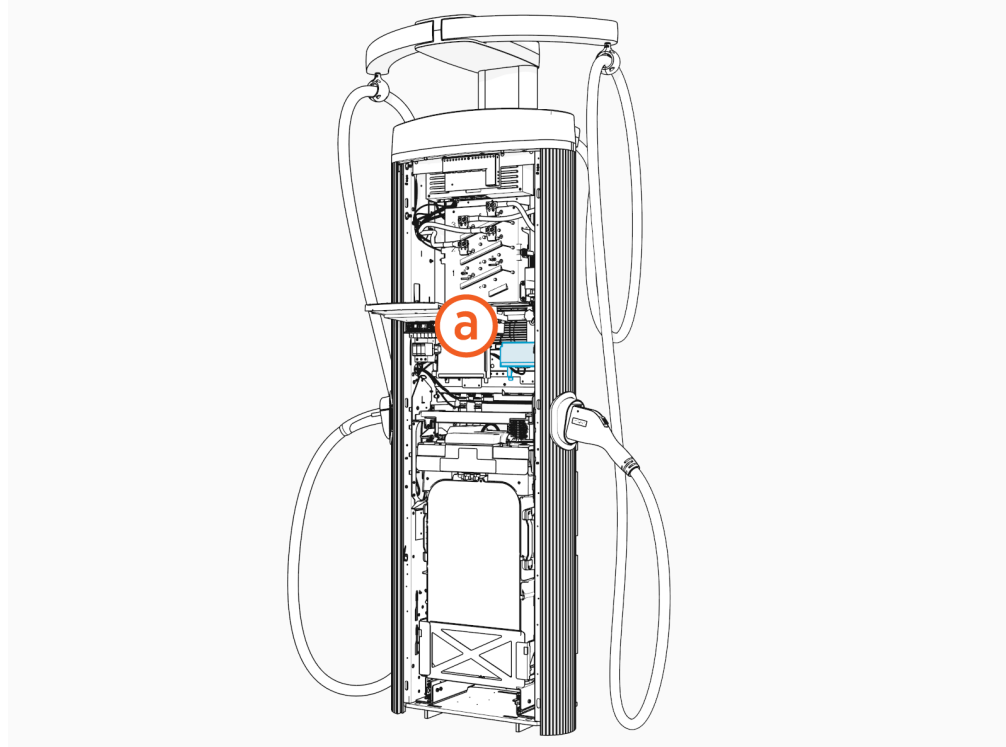
### Troubleshooting

1. Confirm if this is a paired Express 280 or standalone. If it is standalone, send out dispatch to inspect the landing of the DC cables. If they are wrongly wired to pairing bus, then correct it to resolve the issue.
2. If it is a paired station, then the DC buses are mostly swapped (pairing bus and standalone bus), correct it to resolve the issue.

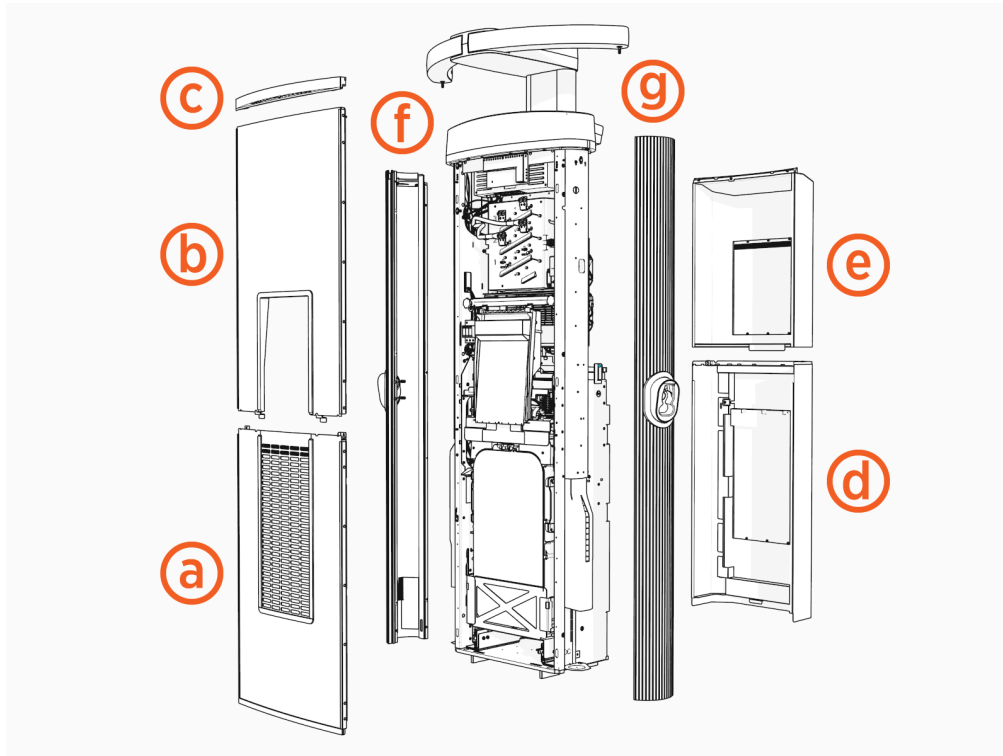
Contact ChargePoint engineering if the issue persists.

# IO Expander Faults

Locate the IO expander (a) near the center on the front side of Express 280 charging stations.



## Express 280 Panels



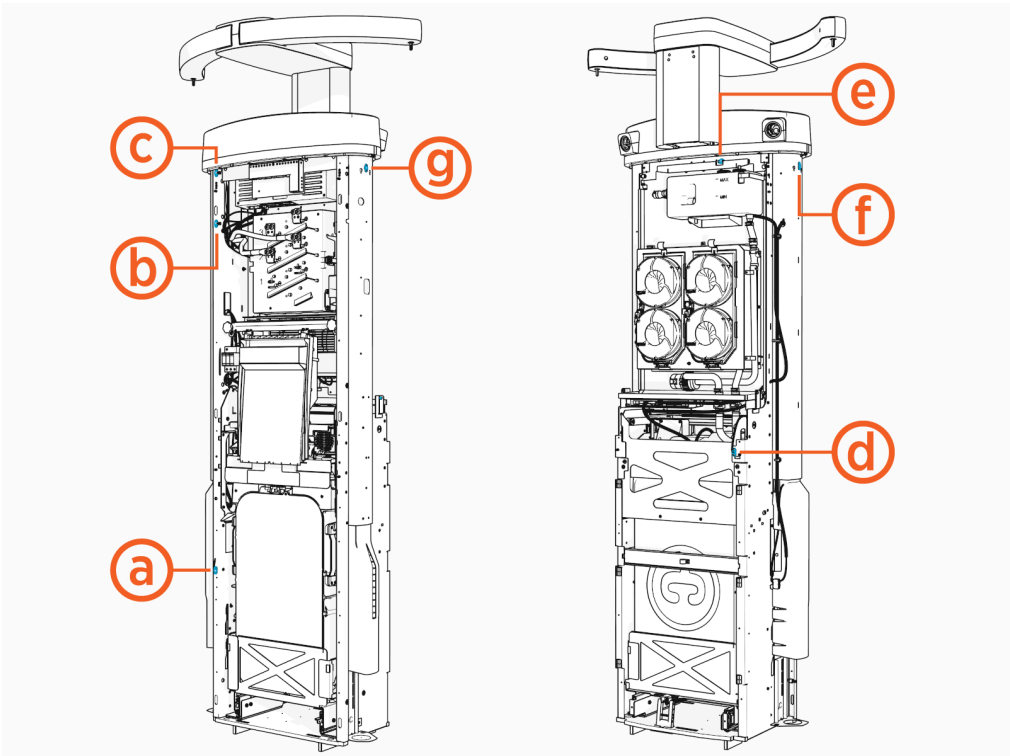
### NOTE:

The panels listed above are shown in a logical sequence for illustration purposes only. These are not the actual hardware panel names.

For reference, the correct panel names as per hardware panel are:

- (a) Front lower panel, **panel A**
- (b) Front upper panel, **panel D**
- (c) Area light bar, **panel E**
- (d) Rear lower panel, **panel G**
- (e) Rear upper panel, **panel H**
- (f) Left side panel, **panel I**
- (g) Right side panel, **panel J**

# Express 280 Sensors



- (a) Front lower panel sensor
- (b) Front upper panel sensor
- (c) Area light bar sensor
- (d) Rear lower panel sensor
- (e) Rear upper panel sensor
- (f) Left side panel sensor
- (g) Right side panel sensor

## Door 0 Fault

### Error code: Decimal - 1201

If panel A door is open or the door sensor magnet is broken, the feedback wire is compromised.

Category	Fault Source	Fault Type	Critical level
IO expander	Panel A door sensor	Hardware	Emergency

### Possible Causes

- Panel A is open
- Magnet is broken or not in place

- Feedback wire is compromised
- Failed IO expander

## Troubleshooting

1. Refer to [Sensor Placement](#) for location of the door sensor.
2. If the magnet is missing or damaged or the whole panel is missing, broken, or damaged, contact ChargePoint Support for Field Replacement Unit (FRU) replacement.
3. Confirm if the panel is seated according to the *Express 280 Installation Guide*. If misplaced, wrongly seated, then correctly seat them and confirm if the fault clears.
4. If issue persists after step 3, then the feedback wire might be compromised.
  - a. Measure continuity between 5 and 11 on connector J9 going to IO Expander. If it reads short, then the feedback wire is compromised. Contact ChargePoint Support for FRU replacement.
  - b. Measure continuity between pin 5 and White wire (2-wire feedback) from door sensor on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
  - c. Measure continuity between pin 11 and Black wire (2-wire feedback) from door sensor on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
5. If feedback wire is confirmed good, then issue could be with the IO expander FRU. Contact ChargePoint Support for FRU replacement.

## Door 1 Fault

### Error code: Decimal - 1203

If panel B door is open or the door sensor magnet is broken, the feedback wire is compromised.

Category	Fault Source	Fault Type	Critical level
IO expander	Panel B door sensor	Hardware	Emergency

### Possible Causes

- Panel B is open
- Magnet is broken or not in place
- Feedback wire is compromised
- Failed IO expander

## Troubleshooting

1. Refer to [Sensor Placement](#) for location of the door sensor.
2. If the magnet is missing or damaged (on the dispenser or panel) or the whole panel is missing, contact ChargePoint for FRU replacement.
3. Confirm if the panel is seated according to the *Express 280 Installation Guide*. If misplaced, wrongly seated, then correctly seat them and confirm if the fault clears.

4. If issue persists after step 3, then the feedback wire might be compromised.
  - a. Measure continuity between 3 and 9 on connector x. If it reads short, then the feedback wire is compromised. Contact ChargePoint Support for FRU replacement.
  - b. Measure continuity between pin 3 and Green wire (2-wire feedback) from door sensor side on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
  - c. Measure continuity between pin 9 and Blue wire (2-wire feedback) from door sensor on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
5. If feedback wire is confirmed good, then issue could be with the IO expander FRU. Contact ChargePoint Support for FRU replacement.

## Door 3 Fault

### Error code: Decimal - 1205

If panel C door is open or the door sensor magnet is broken, the feedback wire is compromised.

Category	Fault Source	Fault Type	Critical level
IO expander	Panel C door sensor	Hardware	Emergency

### Possible Causes

- Panel C is open
- Magnet is broken or not in place
- Feedback wire is compromised
- Failed IO expander

### Troubleshooting

1. Refer to [Sensor Placement](#) for location of the door sensor.
2. If the magnet is missing or damaged (on the dispenser or panel) or the whole panel is missing, contact ChargePoint Support for FRU replacement.
3. Confirm if the panel is seated according to the *Express 280 Installation Guide*. If misplaced, wrongly seated, then correctly seat them and confirm if the fault clears.
4. If issue persists after step 3, then the feedback wire might be compromised.
  - a. Measure continuity between 1 and 7 on connector J9 going to IO Expander. If it reads short, then the feedback wire is compromised. Contact ChargePoint Support for FRU replacement.
  - b. Measure continuity between pin 1 and Brown wire (2-wire feedback) from door sensor side on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
  - c. Measure continuity between pin 7 and Red wire (2-wire feedback) from door sensor on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
5. If feedback wire is confirmed good, then issue could be with the IO expander FRU. Contact ChargePoint Support for FRU replacement.

## Door 4 Fault

### Error code: Decimal - 1206

If panel D door is open or the door sensor magnet is broken, the feedback wire is compromised.

Category	Fault Source	Fault Type	Critical level
IO expander	Panel D door sensor	Hardware	Emergency

### Possible Causes

- Panel D is open
- Magnet is broken or not in place
- Feedback wire is compromised
- Failed IO expander

### Troubleshooting

1. Refer to [Sensor Placement](#) for location of the door sensor.
2. If the magnet is missing or damaged (on the dispenser or panel) or the whole panel is missing, contact ChargePoint Support for FRU replacement.
3. Confirm if the panel is seated according to the *Express 280 Installation Guide*. If misplaced, wrongly seated, then correctly seat them and confirm if the fault clears.
4. If issue persists after step 3, then the feedback wire might be compromised.
  - a. Measure continuity between 7 and 14 on connector J10 going to IO Expander. If it reads short, then the feedback wire is compromised. Contact ChargePoint Support for FRU replacement.
  - b. Measure continuity between pin 7 and White wire (2-wire feedback) from door sensor side on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
  - c. Measure continuity between pin 14 and Black wire (2-wire feedback) from door sensor on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
5. If feedback wire is confirmed good, then issue could be with the IO expander FRU. Contact ChargePoint Support for FRU replacement.

## Door 5 Fault

### Error code: Decimal - 1208

If panel E door is open or the door sensor magnet is broken, the feedback wire is compromised.

Category	Fault Source	Fault Type	Critical level
IO expander	Panel E door sensor	Hardware	Emergency

## Possible Causes

- Panel E is open
- Magnet is broken or not in place
- Feedback wire is compromised
- Failed IO expander

## Troubleshooting

1. Refer to [Sensor Placement](#) for location of the door sensor.
2. If the magnet is missing or damaged (on the dispenser or panel) or the whole panel is missing, contact ChargePoint Support for FRU replacement.
3. Confirm if the panel is seated according to the *Express 280 Installation Guide*. If misplaced, wrongly seated, then correctly seat them and confirm if the fault clears.
4. If issue persists after step 3, then the feedback wire might be compromised.
  - a. Measure continuity between 5 and 12 on connector J10 going to IO Expander. If it reads short, then the feedback wire is compromised. Contact ChargePoint Support for FRU replacement.
  - b. Measure continuity between pin 5 and Green wire (2-wire feedback) from door sensor side on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
  - c. Measure continuity between pin 12 and Blue wire (2-wire feedback) from door sensor on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
5. If feedback wire is confirmed good, then issue could be with the IO expander FRU. Contact ChargePoint Support for FRU replacement.

## Door 6 Fault

### Error code: Decimal - 1209

If panel F door is open or the door sensor magnet is broken, the feedback wire is compromised.

Category	Fault Source	Fault Type	Critical level
IO expander	Panel F door sensor	Hardware	Emergency

## Possible Causes

- Panel F is open
- Magnet is broken or not in place
- Feedback wire is compromised
- Failed IO expander

## Troubleshooting

1. Refer to [Sensor Placement](#) for location of the door sensor.
2. If the magnet is missing or damaged (on the dispenser or panel) or the whole panel is missing, contact ChargePoint Support for FRU replacement.



3. Confirm if the panel is seated according to the *Express 280 Installation Guide*. If misplaced, wrongly seated, then correctly seat them and confirm if the fault clears.
4. If issue persists after step 3, then the feedback wire might be compromised.
  - a. Measure continuity between 4 and 11 on connector J10 going to IO Expander. If it reads short, then the feedback wire is compromised. Contact ChargePoint Support for FRU replacement.
  - b. Measure continuity between pin 4 and Orange wire (2-wire feedback) from door sensor side on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
  - c. Measure continuity between pin 11 and Yellow wire (2-wire feedback) from door sensor on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
5. If feedback wire is confirmed good, then issue could be with the IO expander FRU. Contact ChargePoint Support for FRU replacement.

## Door 7 Fault

### Error code: Decimal - 1210

If panel G door is open or the door sensor magnet is broken, the feedback wire is compromised.

Category	Fault Source	Fault Type	Critical level
IO expander	Panel G door sensor	Hardware	Emergency

### Possible Causes

- Panel G is open
- Magnet is broken or not in place
- Feedback wire is compromised
- Failed IO expander

### Troubleshooting

1. Refer to [Sensor Placement](#) for location of the door sensor.
2. If the magnet is missing or damaged (on the dispenser or panel) or the whole panel is missing, contact ChargePoint Support for FRU replacement.
3. Confirm if the panel is seated according to the *Express 280 Installation Guide*. If misplaced, wrongly seated, then correctly seat them and confirm if the fault clears.

4. If issue persists after step 3, then the feedback wire might be compromised.
  - a. Measure continuity between 3 and 10 on connector J10 going to IO Expander. If it reads short, then the feedback wire is compromised. Contact ChargePoint Support for FRU replacement.
  - b. Measure continuity between pin 3 and Brown wire (2-wire feedback) from door sensor side on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
  - c. Measure continuity between pin 10 and Red wire (2-wire feedback) from door sensor on dispenser. If there is no continuity, then there is a break in feedback wire. Contact ChargePoint Support for FRU replacement.
5. If feedback wire is confirmed good, then issue could be with the IO expander FRU. Contact ChargePoint Support for FRU replacement.

## Emergency Shutoff Fault (external e-stop)

### Error code: Decimal - 1248

E-off (external to the dispenser) is triggered resulting in system shutdown. E-off optional to customer.

Category	Fault Source	Fault Type	Critical level
IO expander	E-stop triggered shutdown	Hardware	Emergency

### Possible Causes

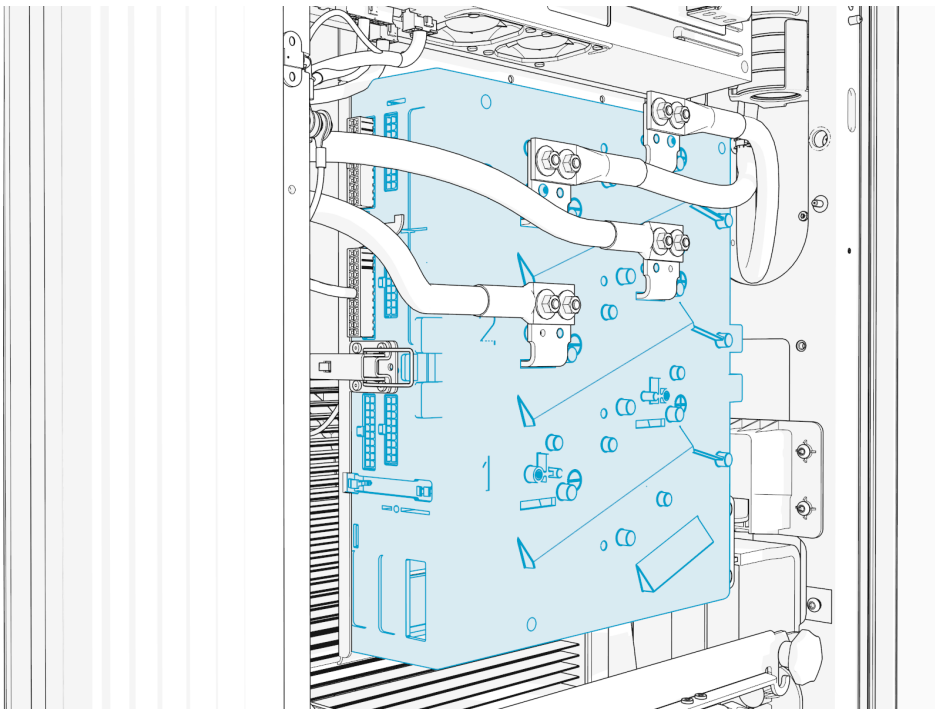
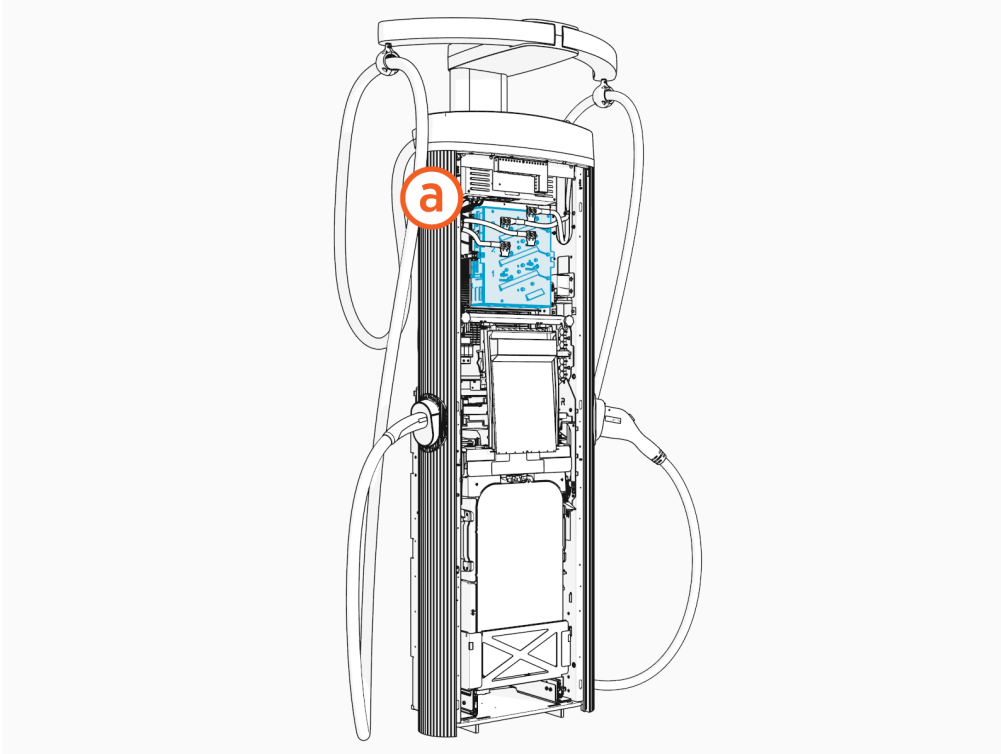
- Actual emergency event leading to E-off trigger
- Wiring feedback from E-off to AUXPS is compromised
- Issue with E-off internal circuitry
- Issue with AUXPS

### Troubleshooting

1. Check with the customer if the E-off was intentionally triggered. If yes, then customer must turn off E-off and boot up the system.
2. If the E-off trigger was intentional due to some emergency issue on our dispenser, contact ChargePoint Support for assistance.

# Isolation Monitor Faults

Locate the isolation monitor (a) on the front of Express 280 charging stations.



## urn:fault:isomon:isolation-fault

### Error code: Decimal - 801

This fault is declared when isolation resistance between DC+ to GND or DC- to GND is lower than the threshold. The fault clears when the resistance goes above the threshold.

Category	Fault Source	Fault Type	Critical level
Isolation monitor	Isomon	Hardware	Critical

#### Possible Causes

- Real event leading to isolation loss
- Isolation monitor board failure

#### Troubleshooting

1. Inspect the unit for any actual electrical event that would have led to break in isolation. Power down the unit and open up the system to confirm there is no arcing and no other failure is visible on the unit.
2. Measure continuity across DC+ and GND and DC- and GND. If there is any short detected, then more investigation is needed to fix the issue on hand.



**NOTE:** Cables on both ends need to be disconnected before performing Meggar test.

3. If no issues found after above tests, then replace the contactor box/MDS box to fix the issue. Contact ChargePoint engineering if the issue persists.

## urn:fault:isomon:self-test-failed

### Error code: Decimal - 804

This fault is declared when system notices a break in isolation during self-test.

Category	Fault Source	Fault Type	Critical level
Isolation monitor	Isomon	Hardware	Critical

#### Possible Causes

- Real event leading to isolation loss
- Isolation monitor board failure

#### Troubleshooting

1. Inspect the unit for any actual electrical event that would have led to break in isolation. Power down the unit and open up the system to confirm there is no arcing and no other failure is visible on the unit.

2. Measure continuity across DC+ and GND and DC- and GND. If there is any short detected, then more investigation is needed to fix the issue on hand.
3. If issue persists, then perform isolation resistance measurement test on the DC cable.



**NOTE:** Cables on both ends need to be disconnected before performing Meggar test.

4. If no issues found after above tests, then replace the contactor box/MDS box to fix the issue.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:isomon:relay-stuck-closed

### Error code: Decimal - 821/822/823

This fault is declared when system recognizes a stuck closed contactor (or aux contacts) in the contactor box/MDS box.

Category	Fault Source	Fault Type	Critical level
Isolation monitor	Isomon	Hardware	Critical

### Possible Causes

- Stuck contactor due to EV side event
- Bad contactor/driving circuit

### Troubleshooting

1. Confirm if this fault was declared at the end of the session. If yes, check the NOS alarms for any abnormal session sequence message. If yes, contact ChargePoint engineering to understand if EV opening the contactor under load led to this failure. ChargePoint engineering may need to contact OEM to fix the issue prior to swapping out the contactor box. Mostly true with fleet units, but cannot be ruled out at public sites.
2. If no such abnormal behavior is noted, then replace the contactor box/MDS box to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:isomon:relay-stuck-open

### Error code: Decimal - 825/826/827

This fault is declared when system recognizes a stuck open contactor (or aux contacts) in the contactor box/MDS box.

Category	Fault Source	Fault Type	Critical level
Isolation monitor	Isomon	Hardware	Critical

## Possible Causes

- Bad contactor/driving circuit

## Troubleshooting

1. Replace the contactor box/MDS box to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

# urn:fault:isomon:emergency-shutdown

## Error code: Decimal - 802

This fault is declared when isolation monitor receives an emergency.

Category	Fault Source	Fault Type	Critical level
Isolation monitor	Isomon	Hardware	Critical

## Possible Causes

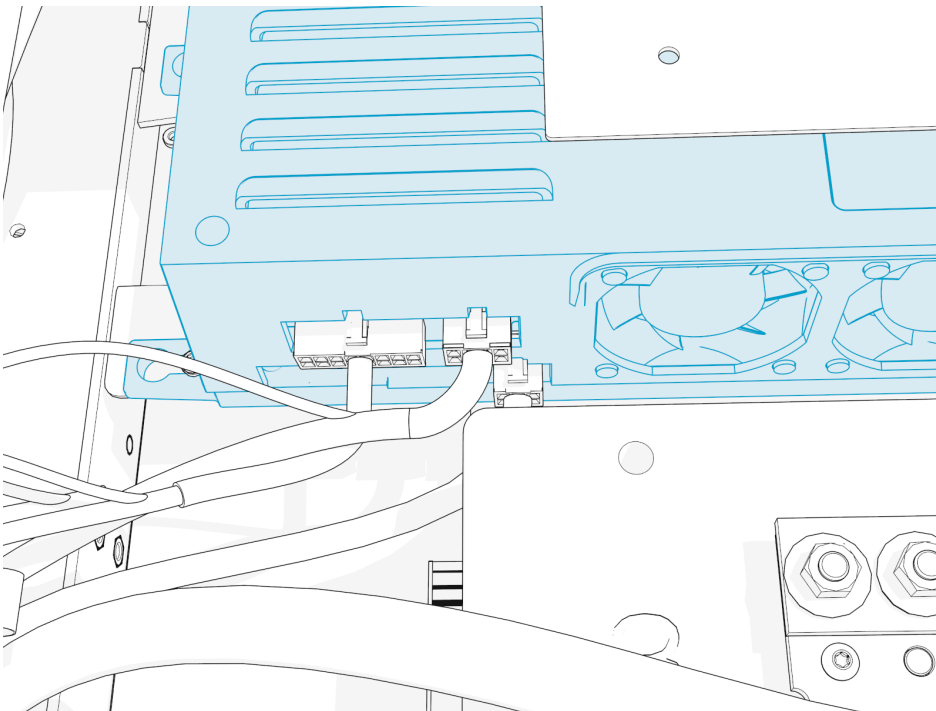
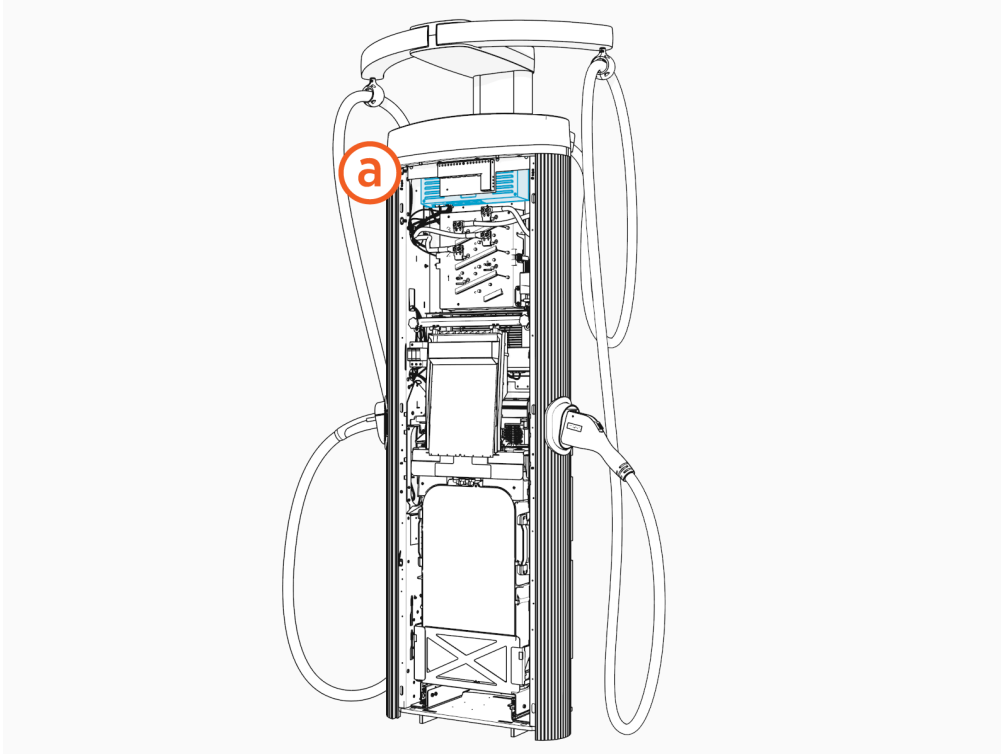
- EV side issues
- Bad contactor / driving circuit

## Troubleshooting

1. Confirm if this fault was declared at the end of the session. If yes, check the NOS alarms for any abnormal session sequence message. If yes, contact ChargePoint engineering to understand if EV opening the contactor under load led to this failure. ChargePoint engineering may need to contact OEM to fix the issue prior to swapping out the contactor box. Mostly true with fleet units, but cannot be ruled out at public sites.
2. If no such abnormal behavior is noted, then replace the contactor box/MDS box to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

## Smart Power Supply Faults

Locate the smart or auxiliary power supply (AUX PS) (a) on the front side of Express 280 charging stations.



## urn:fault:smartpwr:excessive-tilt

### Error code: Decimal - 1405

This fault is declared when the tilt sensor in the power supply detects a value higher than the threshold.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

#### Possible Causes

- Actual event on the unit
- Tilt sensor failure

#### Troubleshooting

1. Confirm if the unit actually has any damage. Earthquake, floods, and other possible natural events could have damaged the unit.
2. If there is no detectable damage to the unit, there could be a sensor failure. Replace the AUX PS to fix the issue.

## urn:fault:smartpwr:impact-detected

### Error code: Decimal - 1406

This fault is declared when the dispenser is impacted by force that was over safe threshold.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

#### Possible Causes

- Actual event on the unit
- Sensor failure on the unit

#### Troubleshooting

1. Confirm if the unit actually has any damage. Earthquake, floods, and other possible natural events could have damaged the unit.
2. If there is no detectable damage to the unit, there could be a sensor failure. Replace the AUX PS to fix the issue.

## urn:fault:smartpwr:internal-comms-error

### Error code: Decimal - 1431

This fault is declared when AUX PS loses CAN communication with DCC. This fault is cleared as soon as CAN comms are reestablished with DCC.



Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

### Possible Causes

- Connector seating issue
- AUX PS failure
- DCC failure

### Troubleshooting

1. Confirm if all the connectors are seated on both AUX PS and DCC side. Inspect the connectors specific to CAN communication (look for labels on the FRUs) and seat them correctly. If any issue found, fix it and confirm if the fault clears.
2. If no connector seating issue found, then replace the AUX PS to fix the issue.
3. If AUX PS replacement does not resolve the issue, then replace the DCC to fix the issue.  
Contact ChargePoint engineering if the issue persists.

## urn:fault:smartpwr:smart-pwr-fan-stuck

### Error code: Decimal - 1401/1402

Fault is declared when fan in the aux power supply is reporting a fault.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

### Possible Causes

- Actual obstruction to the fan blades
- Fan failure

### Troubleshooting

1. Confirm if there is anything blocking the fans on the aux power supply. If yes, then remove the obstruction and confirm the issue clears.
2. If no obstruction found and fault persists, then replace the AUX PS to resolve the issue.

## Ch0 Under Voltage Fault

### Error code: Decimal - 1407

Fault is declared when the output voltage across this channel is less than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

### Possible Causes

- AUX PS failure
- Problem with harness/connector

### Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch1 Under Voltage Fault

### Error code: Decimal - 1408

Fault is declared when the output voltage across this channel is less than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

### Possible Causes

- AUX PS failure
- Problem with harness/connector

### Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch2 Under Voltage Fault

### Error code: Decimal - 1409

Fault is declared when the output voltage across this channel is less than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

### Possible Causes

- AUX PS failure
- Problem with harness/connector

### Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
  2. Replace the AUX PS to resolve the issue.
- Contact ChargePoint engineering if the issue persists.

## Ch3 Under Voltage Fault

### Error code: Decimal - 1410

Fault is declared when the output voltage across this channel is less than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

### Possible Causes

- AUX PS failure
- Problem with harness/connector

### Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
  2. Replace the AUX PS to resolve the issue.
- Contact ChargePoint engineering if the issue persists.

## Ch4 Under Voltage Fault

### Error code: Decimal - 1411

Fault is declared when the output voltage across this channel is less than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

## Possible Causes

- AUX PS failure
- Problem with harness/connector

## Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

# Ch5 Under Voltage Fault

## Error code: Decimal - 1412

Fault is declared when the output voltage across this channel is less than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

## Possible Causes

- AUX PS failure
- Problem with harness/connector

## Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

# Ch6 Under Voltage Fault

## Error code: Decimal - 1413

Fault is declared when the output voltage across this channel is less than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

## Possible Causes

- AUX PS failure
- Problem with harness/connector

## Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch0 Over Voltage Fault

### Error code: Decimal - 1415

Fault is declared when the output voltage across this channel is greater than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-Coolcnt	Hardware	Critical

### Possible Causes

- AUX PS failure
- Problem with harness/connector

## Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch1 Over Voltage Fault

### Error code: Decimal - 1416

Fault is declared when the output voltage across this channel is greater than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-Contactor box	Hardware	Critical

### Possible Causes

- AUX PS failure
- Problem with harness/connector

## Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch2 Over Voltage Fault

### Error code: Decimal - 1417

Fault is declared when the output voltage across this channel is greater than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-DCC	Hardware	Critical

### Possible Causes

- AUX PS failure
- Problem with harness/connector

## Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch3 Over Voltage Fault

### Error code: Decimal - 1418

Fault is declared when the output voltage across this channel is greater than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-IOEXP	Hardware	Critical

### Possible Causes

- AUX PS failure
- Problem with harness/connector

## Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch4 Over Voltage Fault

### Error code: Decimal - 1419

Fault is declared when the output voltage across this channel is greater than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-CPNK	Hardware	Critical

#### Possible Causes

- AUX PS failure
- Problem with harness/connector

#### Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch5 Over Voltage Fault

### Error code: Decimal - 1420

Fault is declared when the output voltage across this channel is greater than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS	Hardware	Critical

#### Possible Causes

- AUX PS failure
- Problem with harness/connector

#### Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch6 Over Voltage Fault

### Error code: Decimal - 1421

Fault is declared when the output voltage across this channel is greater than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-GBT	Hardware	Critical

#### Possible Causes

- AUX PS failure
- Problem with harness/connector

#### Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.

## Ch7 Over Voltage Fault

### Error code: Decimal - 1422

Fault is declared when the output voltage across this channel is greater than 10% of the nominal value. Any ongoing session will be stopped and station is marked under service.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-LED	Hardware	Critical

#### Possible Causes

- AUX PS failure
- Problem with harness/connector

#### Troubleshooting

1. Reseat all the Output connectors on the AUX PS side. See if the issue is resolved with reseating.
2. Replace the AUX PS to resolve the issue.

Contact ChargePoint engineering if the issue persists.



## Ch0 Over Current Fault

### Error code: Decimal - 1423

Fault is declared when output current on the channel exceeds the threshold current. Ch0 is associated with coolant circuitry.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-Coolcnt	Hardware	Critical

### Possible Causes

- Harness issue
- AUX PS failure
- Coolant board / FRU failure - HEX

### Troubleshooting

1. Confirm if there are any pump or fan related faults on the coolant circuitry. Fix the issue and confirm the fault clears.
2. If no fault, then measure continuity across 1 and 6 on connector 7 - going to AUX PS. If it measures a short, then harness has failed. Contact ChargePoint engineering for replacement. If it measures an OPEN, then harness is good. Replace AUX PS to resolve the issue.
3. If issue persists, then replace HEX to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

## Ch1 Over Current Fault

### Error code: Decimal - 1424

Fault is declared when output current on the channel exceeds the threshold current. Ch1 is associated with contactor box.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-Contactor Box	Hardware	Critical

### Possible Causes

- Harness issue
- AUX PS failure
- DCC failure

## Troubleshooting

1. Confirm if there are any faults on the DCC side. Fix the issue and confirm the fault clears.
2. If no fault, then measure continuity across 1 and 6 on connector 8 - going to AUX PS. If it measures a short, then harness has failed. Contact ChargePoint engineering for replacement. If it measures an OPEN, then harness is good. Replace AUX PS to resolve the issue.
3. If issue persists, then replace contactor box to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

## Ch2 Over Current Fault

### Error code: Decimal - 1425

Fault is declared when output current on the channel exceeds the threshold current. Ch2 is associated with Dispenser Charge Controller (DCC).

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-DCC	Hardware	Critical

### Possible Causes

- Harness issue
- AUX PS failure
- Contactor Box failure

## Troubleshooting

1. Confirm if there are any faults on the DCC side. Fix the issue and confirm the fault clears.
2. If no fault, then measure continuity across 2 and 7 on connector 8 - going to AUX PS. If it measures a short, then harness has failed. Contact ChargePoint engineering for replacement. If it measures an OPEN, then harness is good. Replace AUX PS to resolve the issue.
3. If issue persists, then replace DCC to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

## Ch3 Over Current Fault

### Error code: Decimal - 1426

Fault is declared when output current on the channel exceeds the threshold current. Ch3 is associated with IO Expander.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-IOEXP	Hardware	Critical

## Possible Causes

- Harness issue
- AUX PS failure
- IO Expander failure

## Troubleshooting

1. Confirm if there are any faults on the DCC side. Fix the issue and confirm the fault clears.
2. If no fault, then measure continuity across 3 and 8 on connector 8 - going to AUX PS. If it measures a short, then harness has failed. Contact ChargePoint engineering for replacement. If it measures an OPEN, then harness is good. Replace AUX PS to resolve the issue.
3. If issue persists, then replace IO Expander to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

# Ch4 Over Current Fault

## Error code: Decimal - 1427

Fault is declared when output current on the channel exceeds the threshold current. Ch4 is associated with CPNK.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-CPNK	Hardware	Critical

## Possible Causes

- Harness issue
- AUX PS failure
- CPNK failure

## Troubleshooting

1. Confirm if there are any faults on the DCC side. Fix the issue and confirm the fault clears.
2. If no fault, then measure continuity across 4 and 9 on connector 8 - going to AUX PS. If it measures a short, then harness has failed. Contact ChargePoint engineering for replacement. If it measures an OPEN, then harness is good. Replace AUX PS to resolve the issue.
3. If issue persists, then replace CPNK to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

# Ch5 Over Current Fault

## Error code: Decimal - 1428

Fault is declared when output current on the channel exceeds the threshold current. Ch5 is associated with Secondary display/LED bar.

Category	Fault Source	Fault Type	Critical level
Smart power supply	AUX PS-LED	Hardware	Critical

### Possible Causes

- Harness issue
- AUX PS failure
- Secondary/LED display failure

### Troubleshooting

1. Confirm if there are any faults on the DCC side. Fix the issue and confirm the fault clears.
2. If no fault, then measure continuity across 1 and 4 on connector 3 - going to AUX PS. If it measures a short, then harness has failed. Contact ChargePoint engineering for replacement. If it measures an OPEN, then harness is good. Replace AUX PS to resolve the issue.
3. If issue persists, then replace secondary display to resolve the issue.  
Contact ChargePoint engineering if the issue persists.

## Limited Warranty Information and Disclaimer

The Limited Warranty you received with your charging station is subject to certain exceptions and exclusions. For example, your use of, installation 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 limited 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 WITHOUT LIMITATION 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 SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.



[chargepoint.com/support](https://chargepoint.com/support)