INSTALLATION GUIDE

Models：TP5-30-480

DC quick charging stations Installation and operating instructions.
Please read all the instructions before installation and save them for future reference.

MANY THANKS!

Dear customer!

Thank you for purchasing the TellusPower product. Before using or operating this product, please read this manual carefully and keep it safely. The Company is not liable for any accidents caused by a breach of safety precautions or instructions in this manual. This product is live and should only be opened by instructed service personnel or a qualified electrician for service, maintenance or repair and fault handling to avoid electric shock.

ATTENTION

Our company will not assume any responsibility for power damage, personal injury, property loss or damage of charger caused by installation not in accordance with the instructions of this manual.

PLEASE NOTE

TellusPower reserves the right to make changes as necessary in order to comply with industry changes, to account for any errors or omissions, and to ensure a safe, reliable installation process.

The operational and programming manuals are separate from this manual, which covers only electrical and mechanical installation procedures.

Please call our customer support line if there are any questions related to installation or operation of this equipment.

"Please don't make assumptions, call us!"

CONFIDENTIALITY

The TP5-30-480 charger is available in several different voltage and connector configurations, listed below by product number:

TP5-30-480	Max Voltage: 1000VDC; Connectors: CCS1 or NACS or CHAdeMO

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CRITICAL SAFETY

READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

WARNING

This unit is a high-powered electrical device and can be hazardous if improperly installed, serviced, or operated. Failure to follow procedures in this manual could result in extreme hazard to personnel and/or damage to the equipment and related infrastructure. In addition, the installation, service, and maintenance need to comply with local codes and the Authority Having Jurisdiction (AHJ).

IMPORTANT SAFETY INSTRUCTIONS

The symbols used are international icons used to depict various levels of caution when installation, servicing or maintaining the equipment. Same symbols will also appear on the equipment for identifying caution levels required when access certain areas of the charger.

	**DANGER**	High voltage danger label to keep people safe from electrical discharge, which could result in injury or potential death.
	**WARNING**	Warning icon represents hazard, that could result in severe injury or possibly death.
	**GENERAL CAUTION**	Caution icon represents a potential hazard or unsafe practice that could result in injury.

CRITICAL SAFETY

READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

SERVICE WARNING

There are no serviceable items inside the equipment. There is high voltage inside the equipment which could cause severe injury or death. Do not attempt to repair the charge station yourself. This can only be performed by factory qualified personnel.

CHARGING CABLE DAMAGE

Do not operate the charger if the charging cable is damaged or if here are exposed wires in the charging cord assembly. Shut off power at the electrical disconnect or at the breaker. Then immediately contact TellusPower service. If there are any questions, please contact customer service.

SAFETY INSTRUCTIONS

Read the entire installation instructions before designing the installation and prior to installation.
This equipment should be installed by a journeyman level electrician. Local building codes need to be complied with. In most jurisdictions the installation of this equipment requires plan check, building and electrical permits. Verify with the local Authority Having Jurisdiction prior to starting construction.
The charging station relies on the grounding system for safety. All grounding instructions should be strictly adhered to as prescribed in this manual and any applicable electrical safety requirements, all local electrical safety codes, and NEC.

CRITICAL SAFETY READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

HIGH VOLTAGE EQUIPMENT:

This charging system contains both AC and DC high voltage circuitry and devices and should only be installed by a qualified electrician trained to work on high voltage, high current AC and DC systems.

ADDITIONAL CAUTIONARY NOTES

WARNING

Do not have power on while any of the maintenance doors are open unless proper personnel protection equipment is worn.
Only trained personnel should be working in this equipment while the doors are open, and the unit is powered on.

WARNING

There are high voltage and high-capacity energy storage components on this system. There are components and circuits that remain charged for some time (1 to 2 minutes) with high voltage power, even after main power is disconnected. Always test with a voltmeter before any maintenance or service is performed.

Only TellusPower authorized personnel are allowed to perform product repairs.

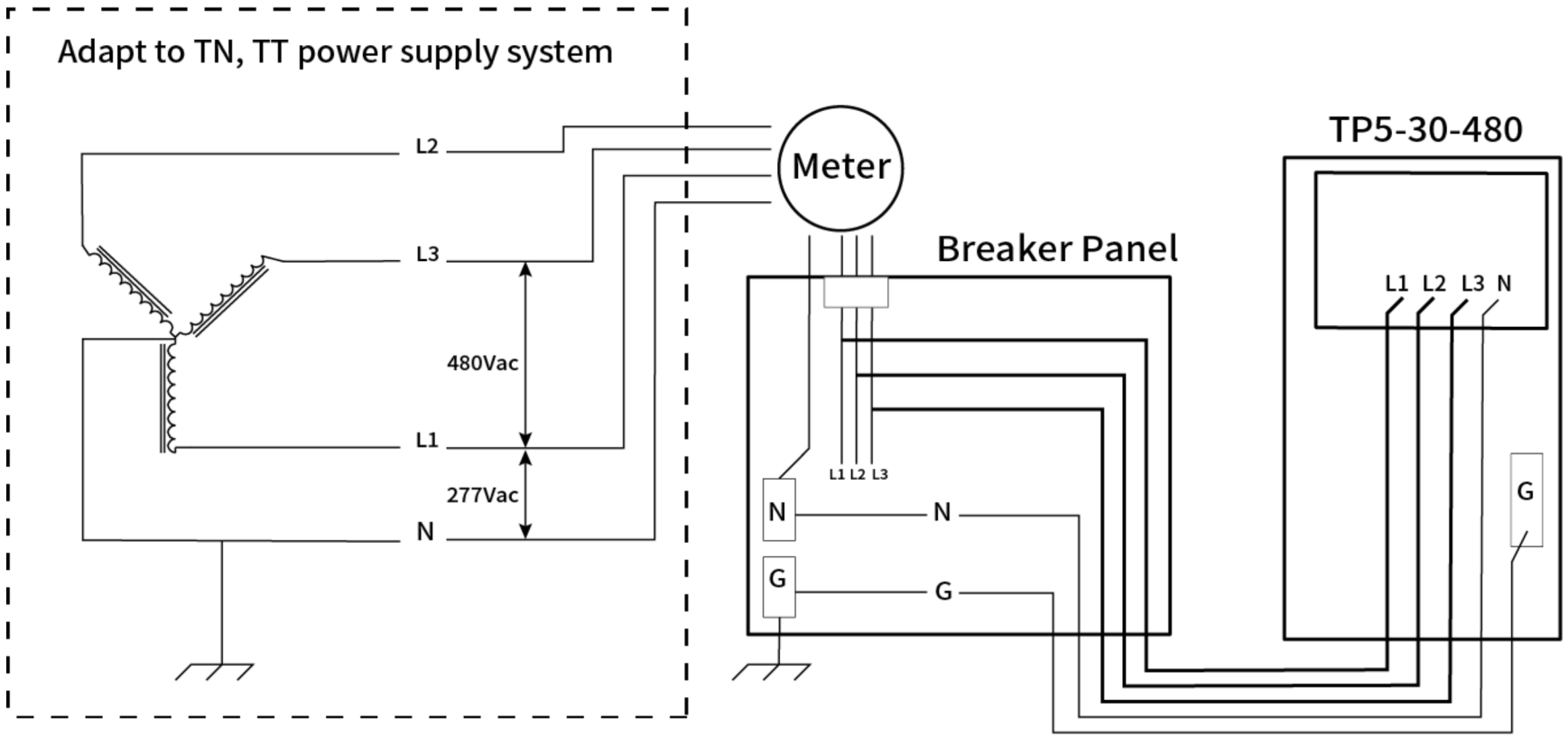
SPECIFICATIONS

Product Number		TP5-30-480
AC Input	AC Input	480VAC (+10%,-15%) || 60Hz
	Power Supply System	3P+N+PE(Wye confiquration),TN/TT
	FLA / Breaker Rating	40A / 50A
	Power Factor	> 0.98 @ full load
	Efficiency	≥94% at nominal output power
DC Output	Max Output Voltage	150-1000VDC
	Max Output Current	CCS1 : 100A NACS : 100A CHAdeMO : 100A
	Connectors	CCS1 Or NACS Or CHAdeMO
Environment	Operating Temperature	-4°F to 131°F (-20°C to 55°C)
	Altitude	< 6500' (2000m)
	Working || Storage Humidity	≤ 95% RH || ≤ 99% RH (Non-condensing)
	Protective Class	NEMA Type 3 (IP54), IK 10
	Cooling System	Air cooling fans
Communication	Communication	Ethernet, Wi-Fi, 4G
	Interface Protocol	OCPP 1.6J, OCPP 2.0.1

SPECIFICATIONS

Product Number		TP5-30-480	
User Interface	Display	7" LCD Touch Screen	
	Access Control	RFID: ISO/IEC 14443A/B || Credit Card Reader - Optional	
	Emergency Stop	Operation buttons/Disables Output Power	
Mechanical	Wall Mount Dimension (W X D X H)	Wall Mount 22.44" x 13.41" x 27.56"	Pedestal Mount 22.44" x 18.13" x 63.09"
	Weight	Wall Mount 157 lbs. (71kg)	Pedestal Mount 205 lbs. (93kg)
	Connector Cable Length	CCS1 – up to 25 ft	
	Cable Management	/	
Protection	Input Protection	GFCI Surge Protection Over Voltage, Under Voltage Over Current, Missing Ground	
	Output Protection	Short circuit protection Insulation protection Over temperature protection	
Regulation	Charging Protocol	ISO-15118, DIN 70121, CHAdeMO 0.9, 1.0	
	Regulatory Compliance	UL-2202,UL-2231-1/-2 || EMC: EN 61000-6-1:2007, EN 61000-6-3:2007/A1:2011/AC:2012	
	Certificate	NRTL - cETLus	

ADAPTED GRID SYSTEM



INSTALLATION OVERVIEW

Electrical Input Requirements	Input voltage: 480 VAC (3 Phase + Neutral + Earth), 60Hz	
	Full Load Amperage: 40 Amps (At Rated power)	
	Breaker Capacity: 50 Amps	
Location	These chargers can be installed on any stable wall or any pole structure with appropriate brackets. The input cable provision is provided from the bottom the charger . The height of the bottom mounting holes on the wall charger back panel should be 3.5 feet from the floor.	
	Charger Dimensions (L X D X H):	wall mount: 22.44" x 13.41" x 27.56"
		pedestal mount: 22.44" x 18.13" x 63.09"
Mounting	Wall Mount / Pedestal Mount	
Cables	Input Cables must be Copper (3P+N+PE). Flexible copper is preferred.	
	Depending on the situation and cable type, the cables must be embedded in the ground with the proper cable ducts.	
Grounding	Reliable, protective grounding must be provided at all times. It is recommended to have a separate, dedicated ground exclusively for the charger in order to ensure the highest degree of safety. The ground resistance should be less than or equal to 4Ω.Copper cable in accordance with the NEC shall be used to connect charger housing to the external ground.	

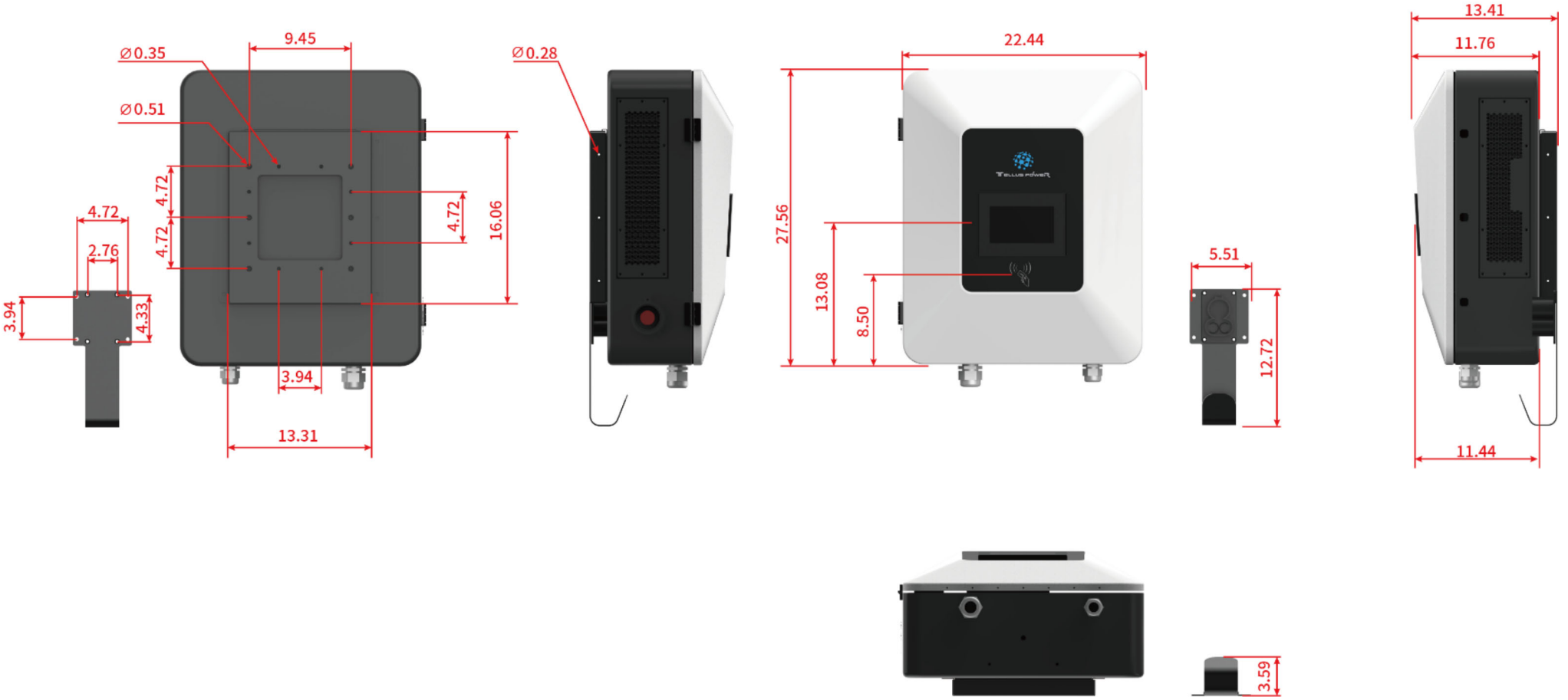
INSTALLATION OVERVIEW

Breaker	Breaker (3P+N) with suitable current capacity depending up on the charger rating to be provided. This shall be in accordance with NEC, typically 1.25 X Full Load Amperage.
Miscellaneous	Copper lugs (Flat type) for input cable and earth cable should be provided based on size of cable.
Additional notes	Do not let any flammable or explosive chemicals, vapors, and/or other dangerous goods within close proximity of the charger
	The charger is rated IP54. In areas which see flooding, heavy rain, storms, snow, or other harsh weather conditions, TellusPower recommends erecting a canopy over and above the charger for the equipment’ s protection.
	Confirm beforehand that the intended installation site has a load capacity sufficient to support this equipment.
	Charging cable length will vary between 13 ft. and 16 ft., depending on options.

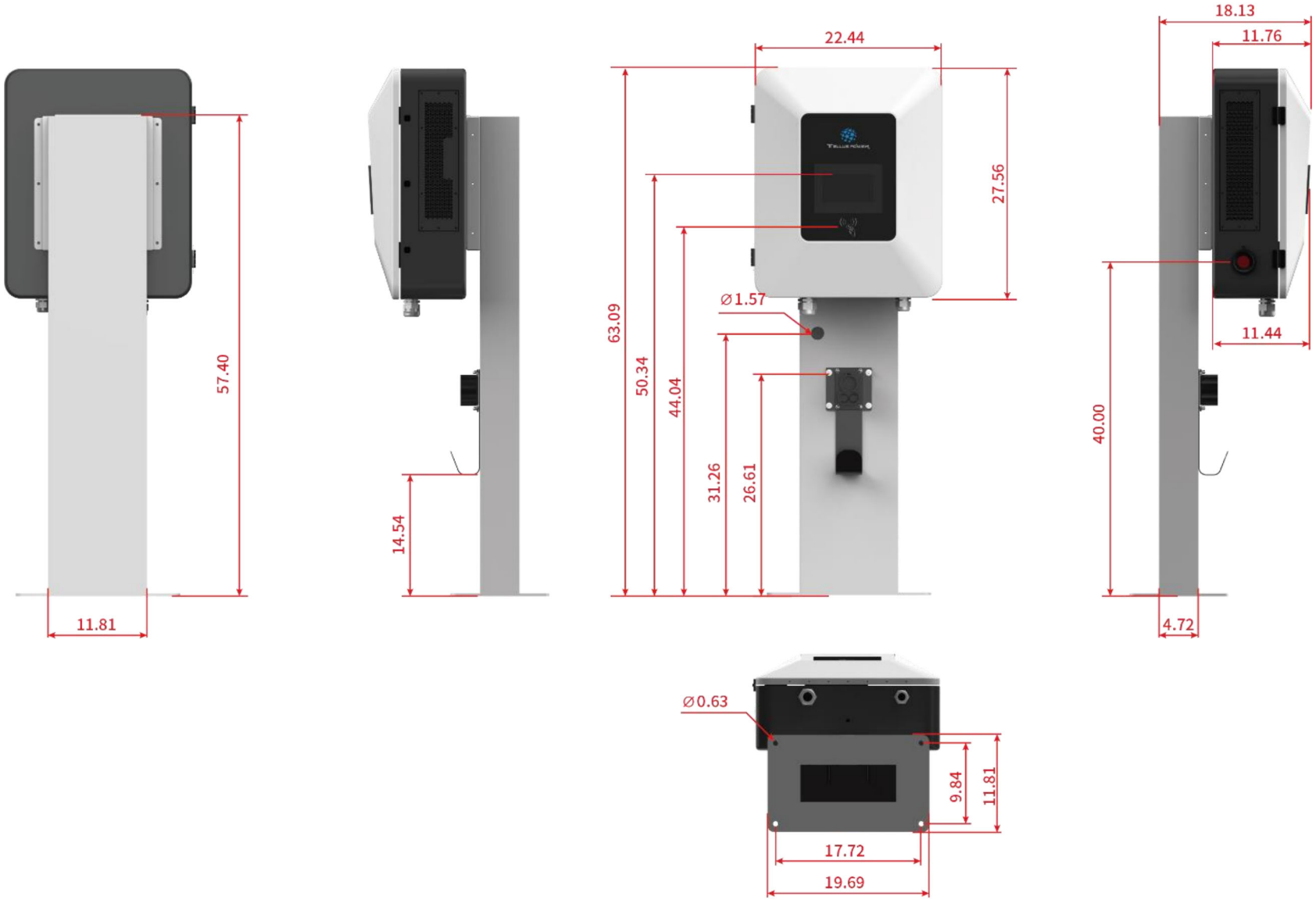
BOX CONTENTS

Item	Quafitity
Intelligent charger	1
Charging gun holder	1
Cable winder	1
Bolt M8 *70	4
Bolt M10 *120	6
Flat Head Screws M6*16 Fixed gun holder and cable winder	4
Screw nut	4
Key	2
Charging Card	3
Certificate	1
Factory inspection report	1
Pedestal Item	**Quafitity**
Screw M8*12	12
Bolt M14 *100	4
Pedestal	1

OUTLINE OF DRAWING - WALL MOUNT



OUTLINE OF DRAWING - PEDESTAL MOUNT



CHARGER ANATOMY

Screen

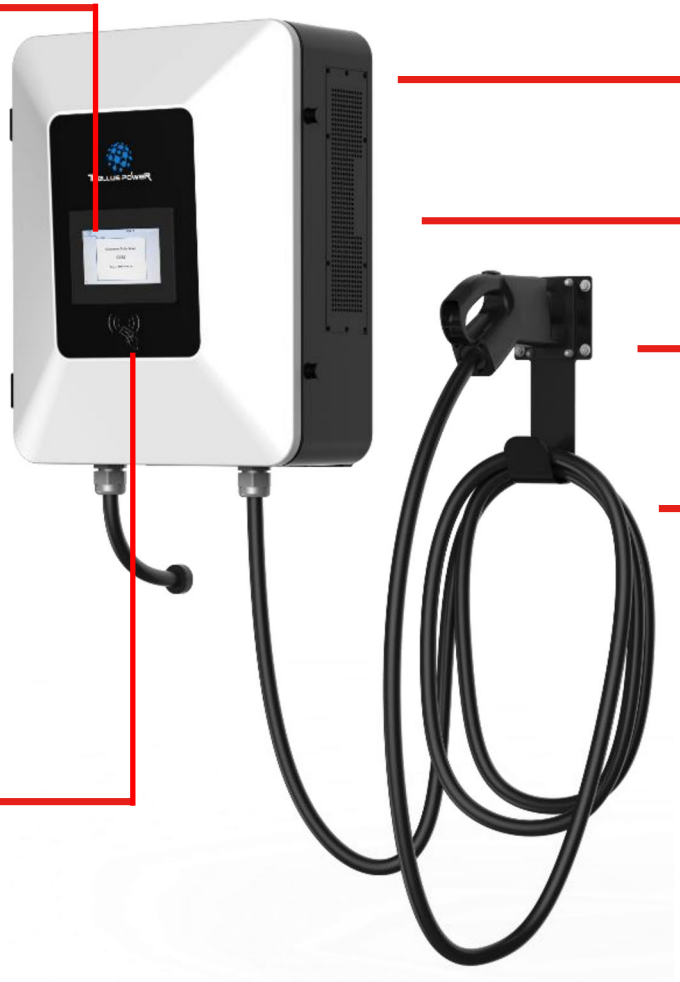
Touchscreen displayprovides real-time instructions andfeedback to EV driversabout services availablepayment options, and any errors

Emergency Stop Button

Safety Measure: Ifpressed,allcharging activitywill be stoppedimmediately

Encrypted RFID Reader

An RFID readerthat identifies EVdrivers when theyplace their RFIDcard on the pad



Lock

Vents

Charging gun holder

Cable winder

Allows for the placement of DCFC connector cables for ease of use and storage

INSTALLATION TOOL

The following tools may be needed

- Short driver handle (for standard bits).
- Right-angle driver ratchet (for standard bits).
- Set of SAE wrenches.
- Hole cutting drill bits to match conduit size.
- Spirit Level.

The following hardware may also be needed

- Wall anchors and fasteners.
- Washers.
- Pad mount concrete anchors.
- Anchor security hardware.

PLACING CHARGER ON THE WALL

A forklift will be required to move the charger into position. The charger will weigh approximately 240 lbs. The chargerwithout the crate weighs approximately 176 lbs.

To lift the charger, use the forklift cut-outs in the lower frame of the charger. The charger will be provided with a mounting bracket, located on the rear of the charge. The mounting bracket comes with holes that are to be used during placement of the station.

Mounting screws are included in the delivery package and should be used on a brick or concrete wall to ensure appropriate support.

WALL MOUNT INSTALLATION

Step 1

Remove the screws on both sides of the installation backplane and take off the installation backplane , Save the screws for later installation.

Step 2

Fix the charging gun seat on the winder.

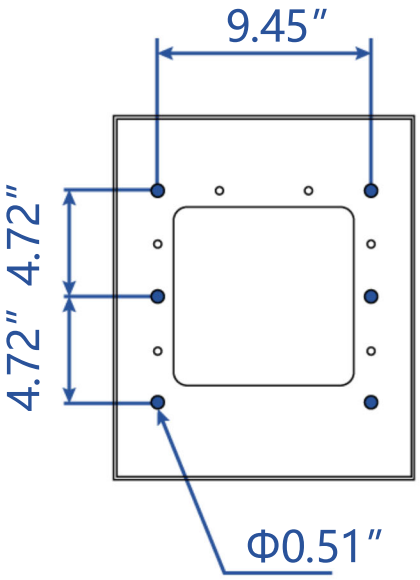
M6*16 flat head screws and nuts.

WALL MOUNT INSTALLATION

Step 3

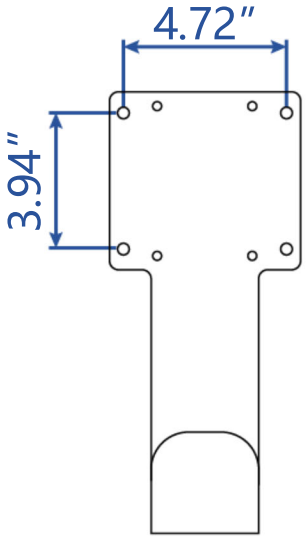
Drill holes on the wall according to the hole position of the backplane and the cable winder.

Bolt M10*120



Use a 15/32″ drill to drill a hole in the wall with a depth of 5.12″ .

Bolt M8*70



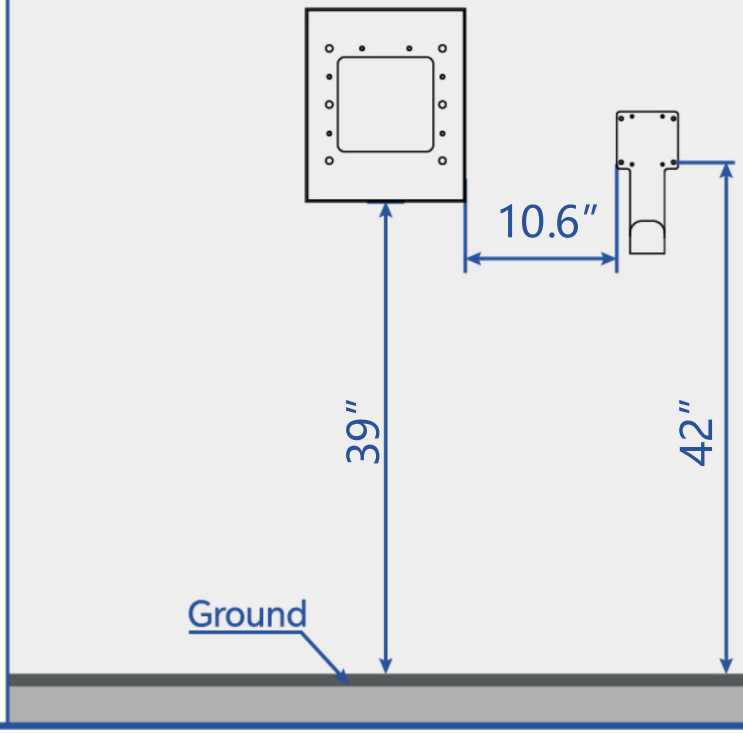
Use a 25/64″ drill bit to drill a hole with a depth of 3.15″ in the wall.

Step 4

Fix the backboard and the cable winder on the wall, and tighten the expansion bolts.

Recommended installation distance between backplane and cable winder

(Decide the installation height according to your needs)



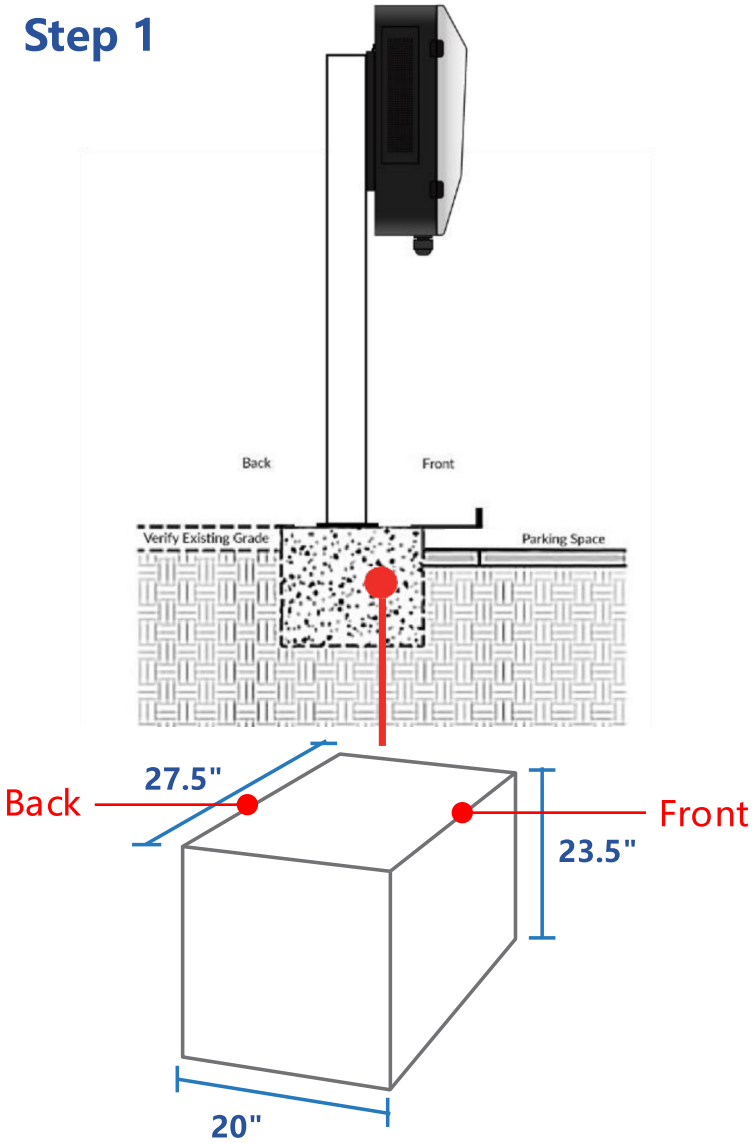
WALL MOUNT INSTALLATION

Step 5

Hang the charging pile on the installed backboard, align the upper hole slot, install the six screws on both sides.

PEDESTAL MOUNT INSTALLATION

Step 1



CONCRETE PAD

Concrete pad using 3,000 to 4,000 psi concrete should be used. Electrical for AC power should be position such that it exits the concrete pad at the Main AC Power Line Opening.

Important things to note

- When making the installation platform, a PVC pipe with a diameter of 100mm is pre-buried, and steel wires are reserved in the PVC pipe for the convenience of wiring.
- The reserved position of the PVC pipe corresponds to the position of the cable inlet at the bottom of the charging pile
- The dimensions of the concrete foundation will need to be determined according to the local jurisdiction. The reference foundation is 23.5 " deep below ground, Foundation fabrication uses steel bars in accordance with relevant standards. Concrete decks can be level with the ground or raised as you wish. Recommended 5/8 " threaded rebar.

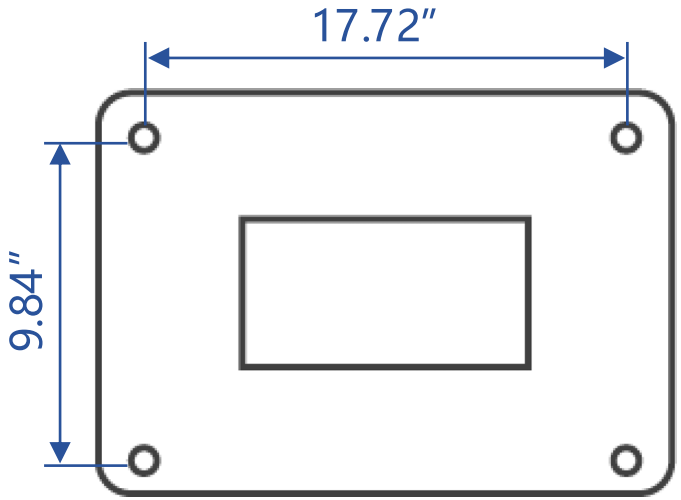
PEDESTAL MOUNT INSTALLATION

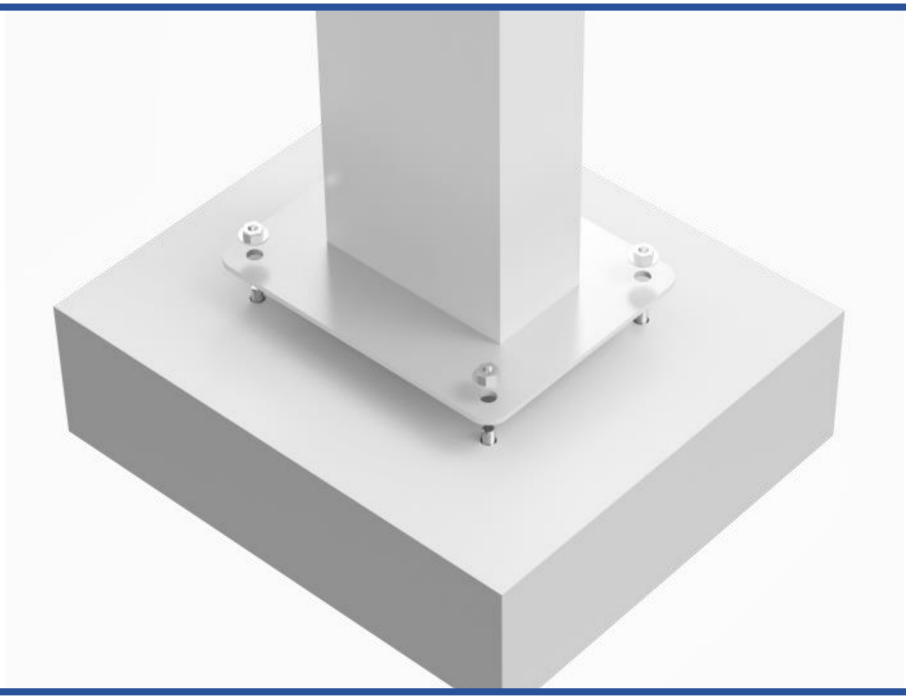
Step 2

Select the installation position of the product on the ground and determine the hole position. Next, use a hammer drill to drill the holes.

The ground holes are 0.71″ in diameter and 4.33″ — 4.72″ in depth.

M14*100





PEDESTAL MOUNT INSTALLATION

Step 3

Remove the screws on both sides of the installation backplane and take off the installation backplane Save the screws for later installation.

Step 4

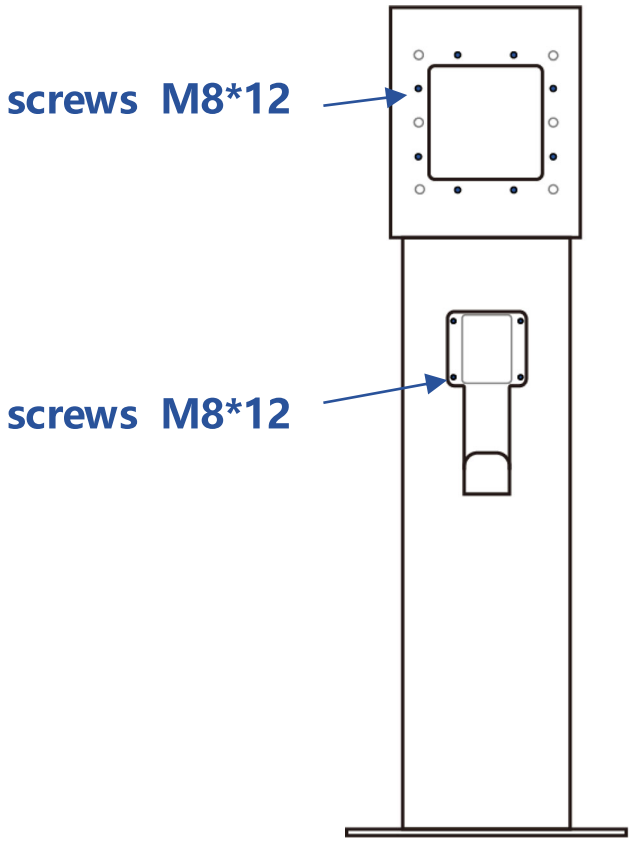
Fix the charging gun seat on the winder.

M6*16 flat head screws and nuts.

PEDESTAL MOUNT INSTALLATION

Step 5

Install the installation backplane and the winding hook on the column, and fix the screws.



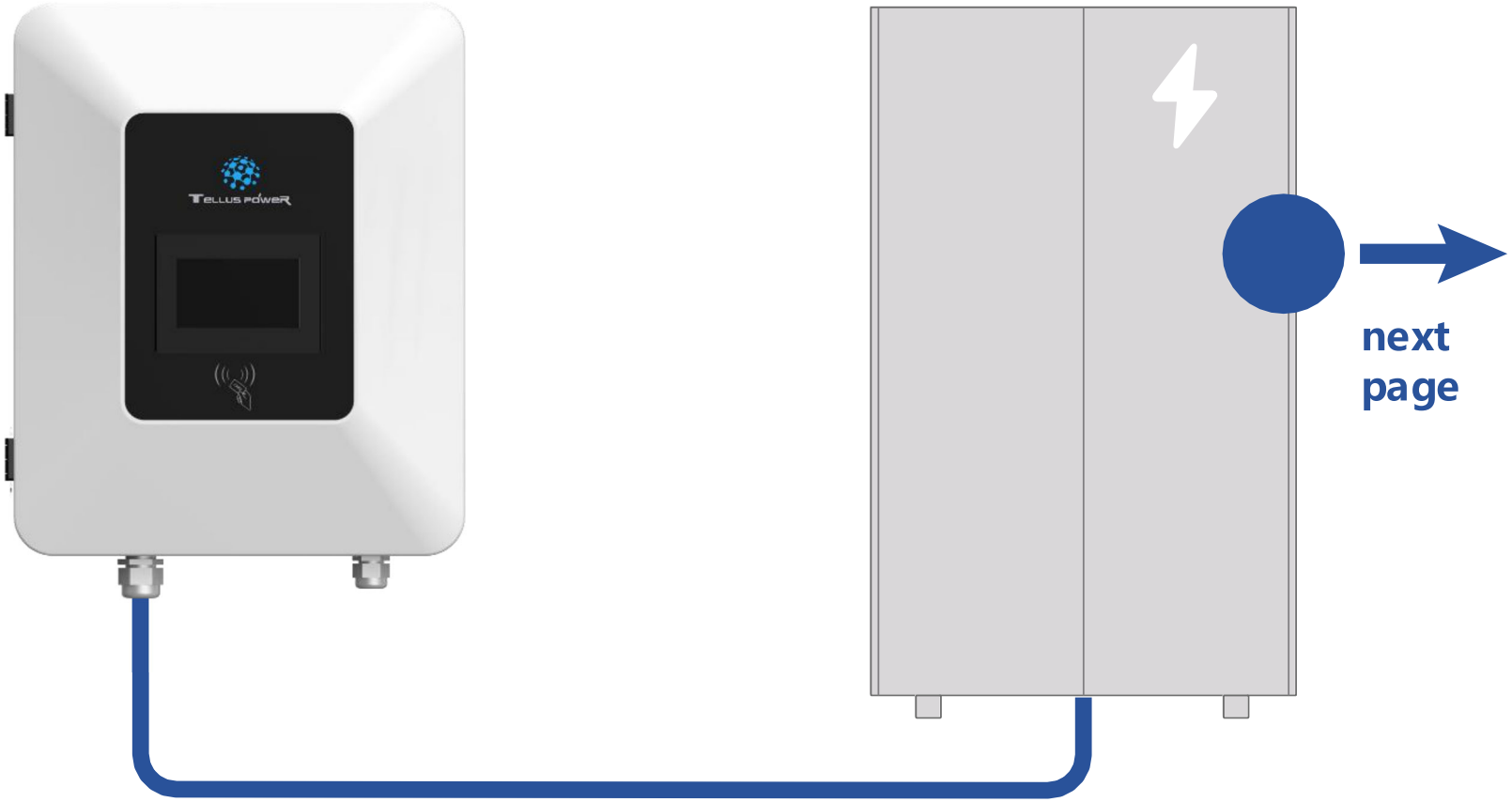
Step 6

Hang the charging pile on the installed backboard, align the upper hole slot, Install the six screws on both sides

INPUT CABLE INSTALLATION

Step 7

The input cable is connected to the plastic case circuit breaker and grounding copper bar in the charging pile from the local power distribution network.



INPUT CABLE INSTALLATION

Wire gauge, breaker size, and installation should follow NEC code.

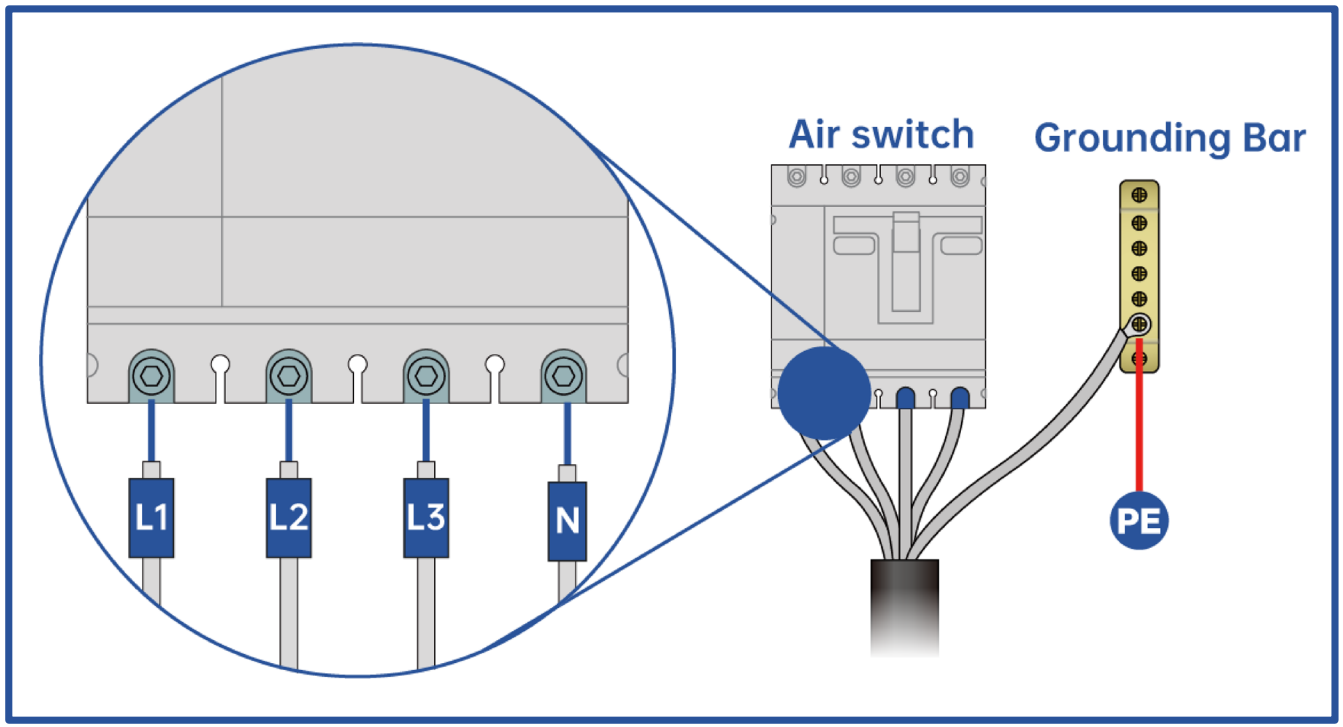
INPUT VOLTAGE

The charger requires an input voltage of 480 VAC (3 Phase + Neutral + Earth), 60Hz, and a current of 40 amps.

AC Input Termination

MAIN BREAKER

- ABC are the 3 Phase lines.
- N is the Neutral .
- PE is the Protective Earth, or Ground.

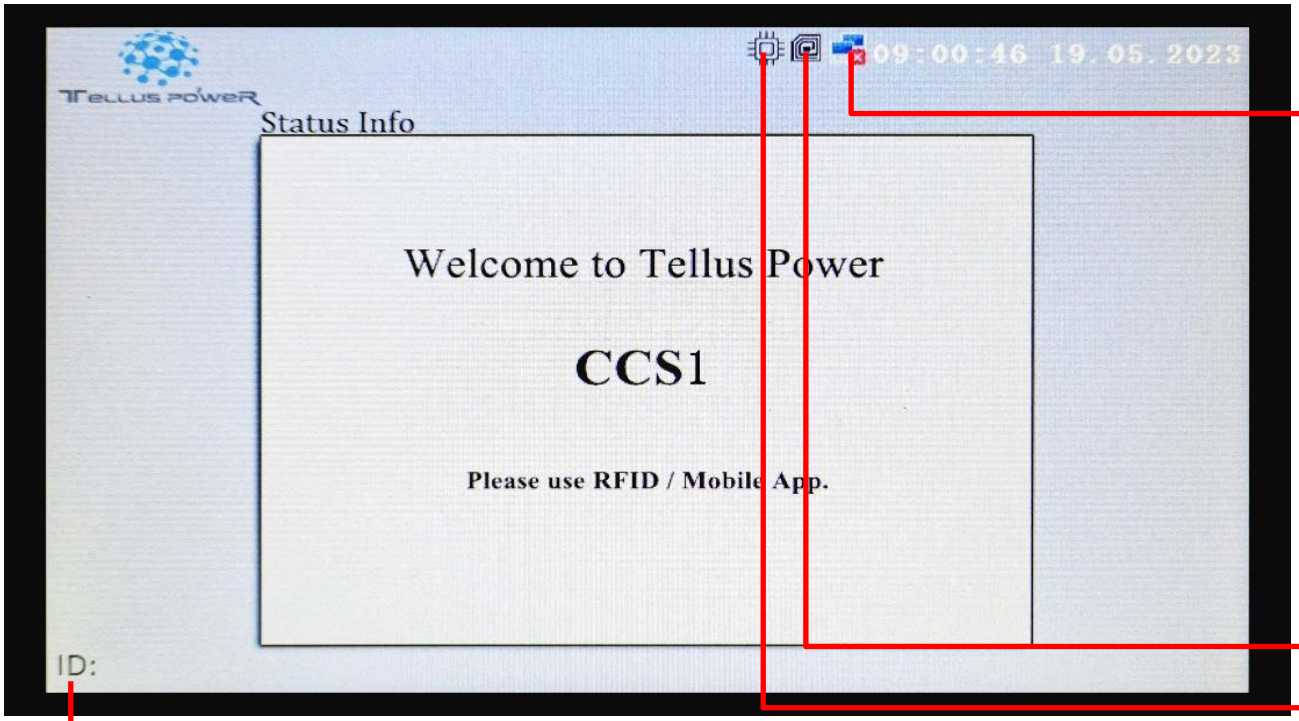


Line Side Single Input Option	Ampere Rating per Pole	Component Description
25 sp. Mm. Please follow local codes	50	codes 63 4 Pole MCB

CHARGER SETTINGS

Setting Parameters

During the initial installation, the setting parameters must be set by the manufacturer, operating partner, or service partner. Changes may only be made by trained personnel.



Click the "logo" to enter thebackground login interface.

The icon indicates if the cradle is connected to a server network if no network is connected, the station works as a stand-alone device with TellusPower RFID cards.

The network is connected, it can only be unlocked with registered RFID cards.

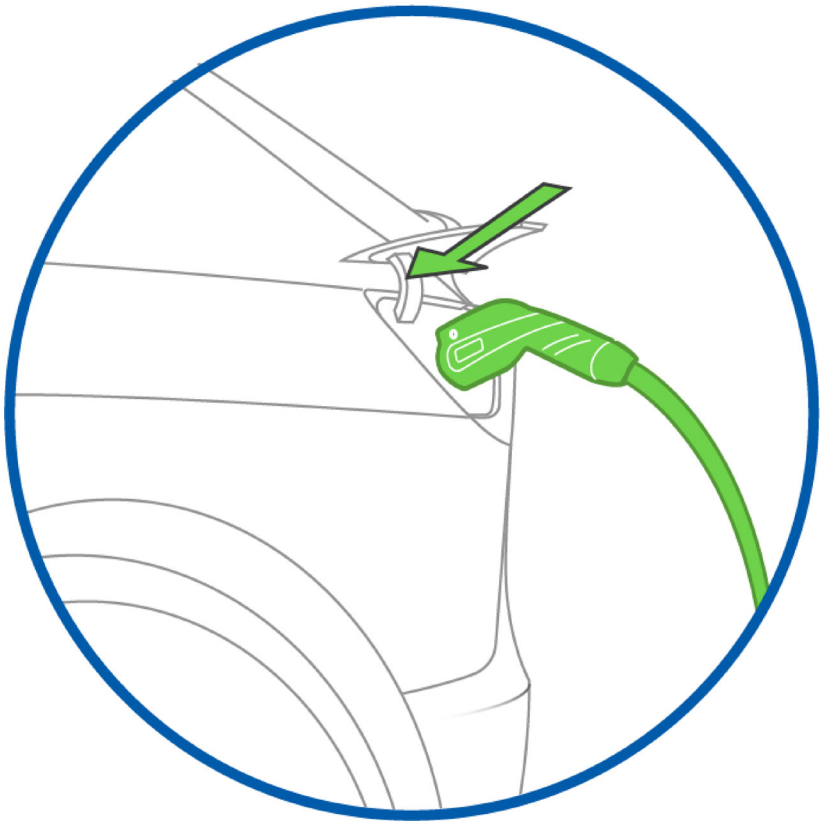
Card version

CM board

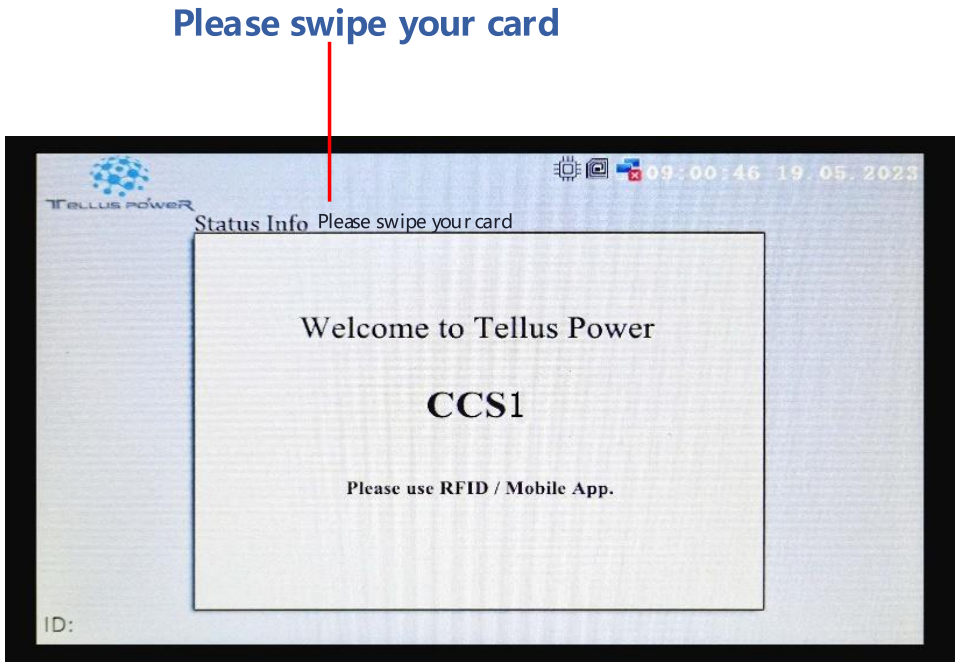
The lower left corner of the screen shows the device number.

HOW TO START A CHARGING SESSION

01. Please select the connector compatible to your EV. Plugin the connector.



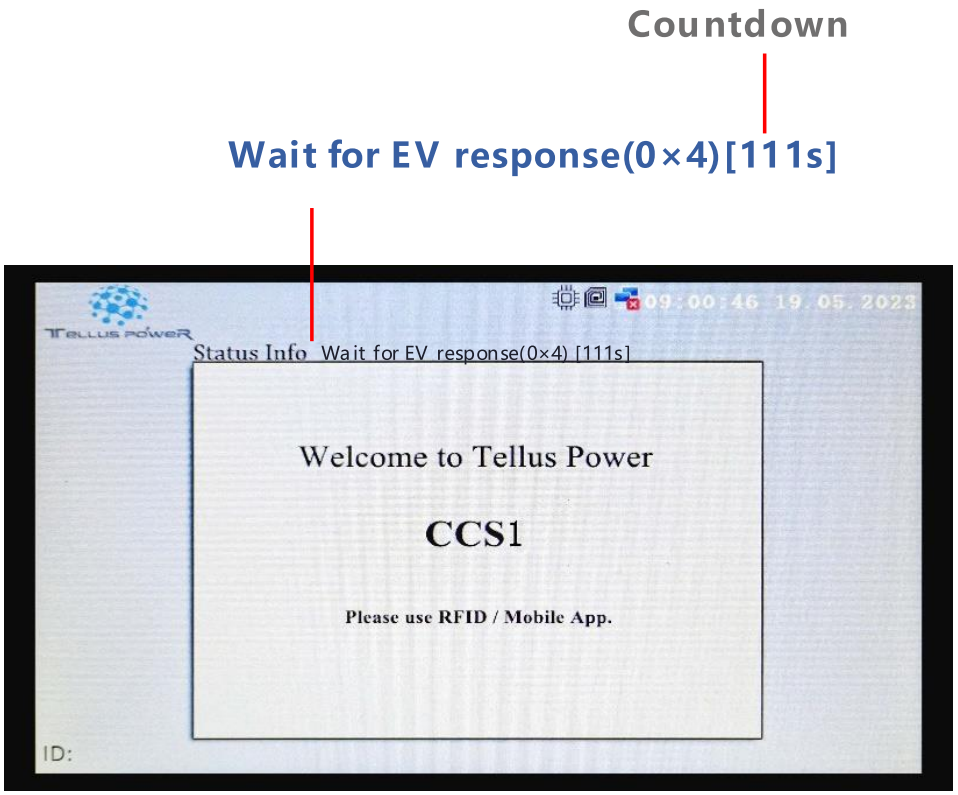
02. After the charging cable is plugged in, it will display "connected", click "connected".



HOW TO START A CHARGING SESSION

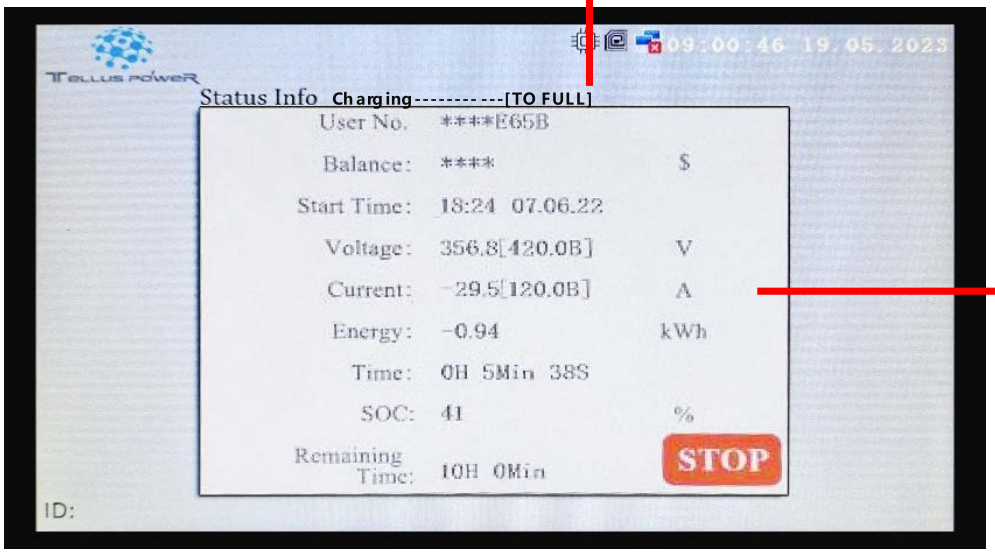
3. Swipe the card.

4. wait about 30 seconds,then start charging.



HOW TO START A CHARGING SESSION

5. Start charging.



Charging----------[TO FULL]

User No. :ID card number

Start Time :Date and time to start charging

Voltage :Real-time voltage display

Current :Real-time current display

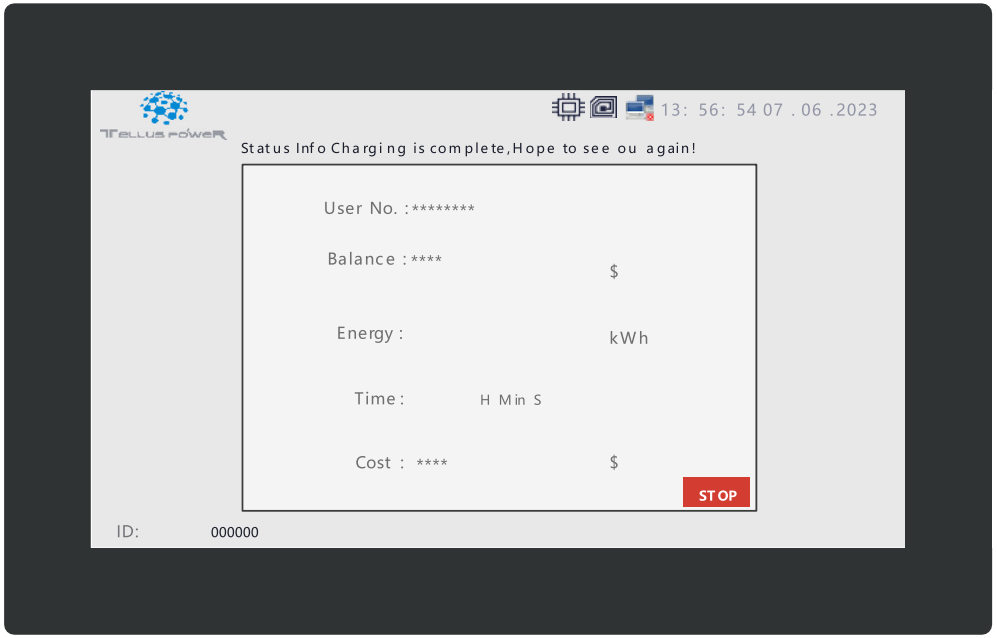
Time :Display charging time

Remaining Time :The time it takes to fully charge

HOW TO START A CHARGING SESSION

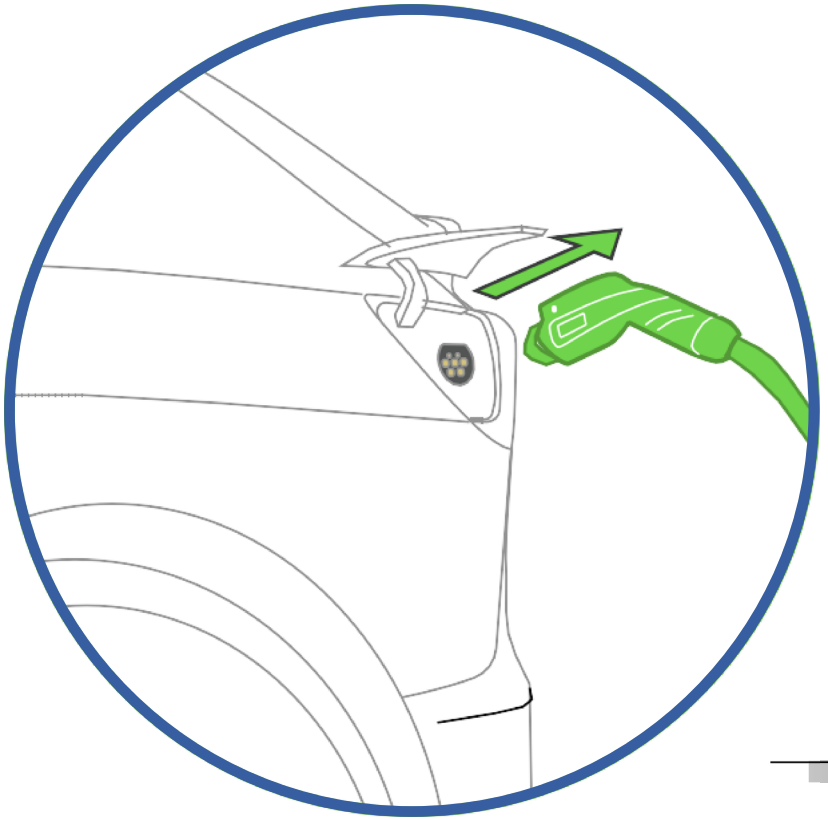
6. Swipe the card to end charging. (Notice! Only after swiping the card can the charging gun be removed from the car)

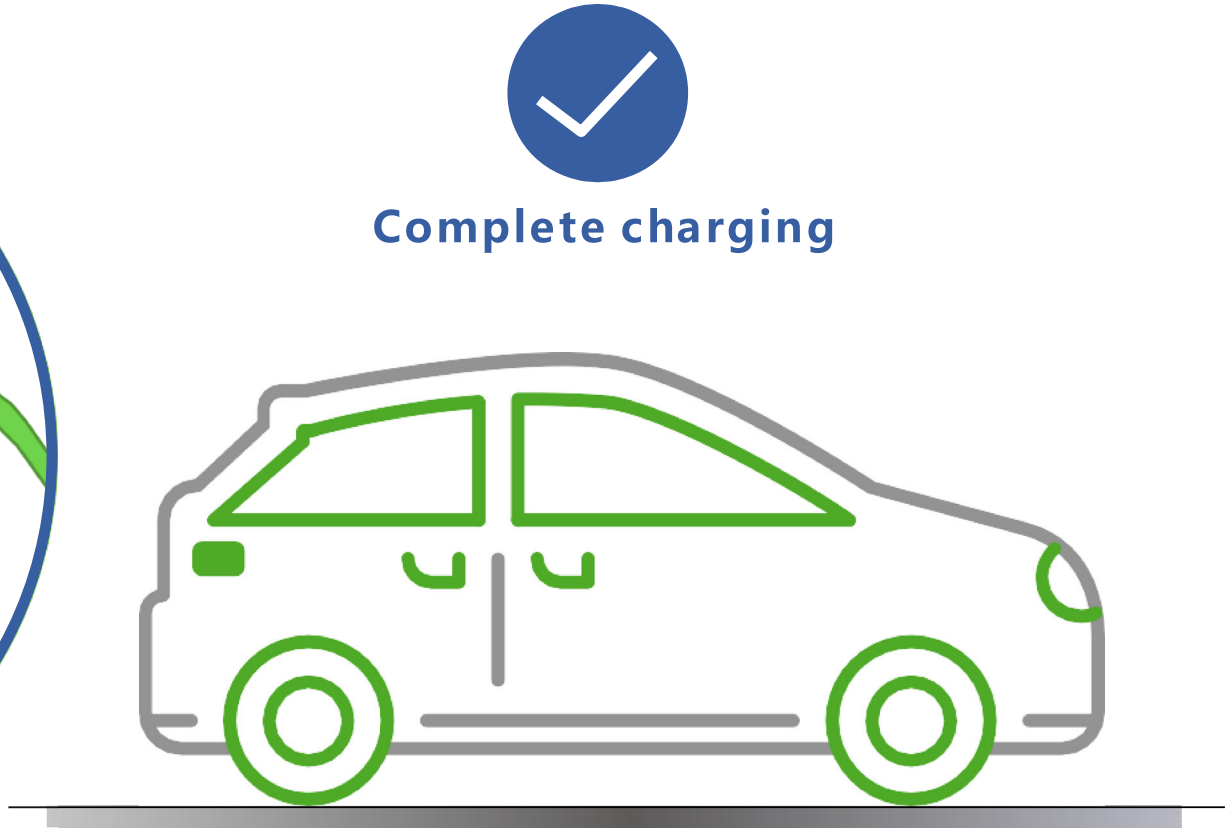
Swipe the card to end charging, or click "stop", the interface will jump to the end interface, and the interface will display charging information and deduction information.



HOW TO START A CHARGING SESSION

7. Take the charging cable out of the car.





MAINTENANCE AND SERVICE

DANGER

READ AND FOLLOW THE "SAFETY CONCERNS" AT THE BEGINNING OF THIS MANUAL BEFORE USING THIS DEVICE.

EV Chargers require regular maintenance beyond installation to ensure the quality of the vehicle's charges and the continued value of your EV. Whether you're installing a personal EV charger or one for public use, eventually your device will require repair or maintenance services to keep the system working without issue.

MAINTENANCE PRECAUTIONS

Each of the capacitors in this device have a high voltage for a time after shutting off the input power supply. Allow 1 minute after powering down before servicing internal components.

MAINTENANCE ITEMS

Perform periodic checks every 3 to 6 months based on the site conditions and the usage of the charger:

1. Check the input voltage and ensure it is within the acceptable limits.
2. Check the Ground / Earth resistance and ensure it is within the acceptable limits
3. Clean the Air Filter periodically
4. Make sure that Power Module lights are blinks green
5. Ensure that the charging cables are not worn out or showing wiring, and that the connector pins are clean.
6. Make sure all the air-cooling fans are working normally.

MAINTENANCE AND SERVICE

VISUAL CHECK ITEMS

1) Check for abnormal sounds from running fans and power units

- If there is abnormal sound, Please don't make assumptions, call us! for further assistance.

2) Check the device for abnormal odors, changes in inner materials, corrosion, anomalies in appearance, etc.

- If there are any anomalies, please contact a TellusPower support representative for further assistance.

3) Check for dust and dirt in this device regularly

- The air filters on the doors can be removed and cleaned using a vacuum cleaner or air blower.
- The cabinet can be cleaned using a vacuum cleaner

  Please pay extra attention while using the vacuum cleaner, it should not apply pressure on the control boards or any components
- The dust on the components can be cleaned using a soft cloth

REPLACEMENT OF FIXED-LIFE COMPONENTS

To prevent the device from failure due to worn out components, it is necessary to replace the components before they reach the end of their lifespan. Use the following replacement intervals as a guideline for the estimate of the total running time.

- Intake and exhaust air filters (if present): Approximately three (3) years. The period depends upon the site conditions.
- Please keep in mind that the replacement interval of each part can vary depending on, for example, the usage environment of the device.

TROUBLESHOOTING

ERROR CODES

If an error occurs, check the nature of the error by referring to following "Error Code List" and take appropriate actions according to instructions by the manufacturer.

ERROR	DESCRIPTION	POSSIBLE SOLUTION
ERROR FLAG 0	Lightning protection device failure	Check the SPD and GFCI circuit
ERROR FLAG 1	Insulation detection abnormal	The insulation check on the EV has failed. Please try to charge different EV.
ERROR FLAG 2	Abnormal communication between Insulation Monitor and Main Control Board (CM)	Please check the connection between the IM and CM boards. Check the LED lights on the CM and IM
ERROR FLAG 3	Abnormal communication between TR board and CM board	Please check the connection between the tr and cmboards. Check the LED lights on the CM and TR
ERROR FLAG 4	Electronic lock failure	Possible failure of the gun to lock on the EV or the 24v supply voltage
ERROR FLAG 5	Internal use	Reserved
ERROR FLAG 6	Abnormal communication between DC meter and Main Control Board (CM)	Please check the connection between the DC and CM boards. Check the LED lights on the CM and communication lines of DC meter.

TROUBLESHOOTING

FAULT TYPE	SOLUTION
IP address communication failure or Server Communication Failure	Please check the parameter settings interface IP address information, such as the corresponding IP address is not correct, please re-enter the address, restart the charging station
AC input over voltage / under voltage	Please check the AC input side of the voltage is too high or too low, excluding the input exception if there is a fault, and then check the parameters set the interface set the threshold is correct
DC output over voltage / over current	Please check whether the output voltage and current are within the range of parameter settings. If not, please check whether the output voltage, current is too high, or whether the parameter setting is reasonable
Card reader failure	The card reader is incorrectly wired, or the card reader is disabled.
Insulation fault	Please check whether the DC bus insulation is normal.
Monitoring board communication failure	Check whether the monitoring board communication line is correct
Charging gun connection failure	Charging gun connection disconnected, please check whether the charging gun is connected properly.

TROUBLESHOOTING

FAULT TYPE	SOLUTION
The emergency stop button is pressed	Check whether the emergency stop button is pressed, if it is, inspect the charger and if everything is normal, release the emergency button and restore the main breaker.
Charging Session shutdown is not successful	MCU board and power module communication failure. Please press emergency stop button to stop the charging. Check the MCU board and power module CAN communication bus.

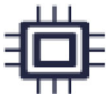
PHYSICAL DIAGNOSTICS AT CHARGER/ON SCREEN

Make sure that the ‘emergency’ button is turned off. Switch ON the charger from the main panel. Switch the Main MCBB and MCB(s) within the charger. Wait for 1 to 2 minutes to boot the machine, and check the three icons in the top-right corner of the charger display.

The icons below will be visible in the top-right corner of the charger screen:

This icon indicates that the charger is not connected to a server network. It can also indicate a loss of internet connectivity. If no network is connected, the charger works as a stand-alone device with TellusPower RFID cards.

This icon indicates that the charger is connected to a server network; it can be authorized with registered RFID cards or the mobile app.



This icon indicates the working condition of the charger. If the icon flashes or is not visible on the screen, the controller is inactive.

This icon indicates that the RFID card reader is active. If the icon is not visible on the screen, the RFID reader is inactive.

EXCLUSIONS FROM LIMITED WARRANTY

- Improper site preparation or maintenance. That has been improperly installed, operated, handled, or used, including use underconditions for which the product was not designed, use in an unsuitable environment, or use in a manner contrary to the TellusPower Installation and Operations Manual or applicable laws or regulations.
- Damage because of accidents, extreme power surge, extreme electromagnetic field.
- Use of the Product with software, interfacing, parts or supplies not supplied by TellusPower.
- TellusPower disclaims any liability for damage to product, property, or personal injury resulting in whole or in part, from improper installation, maintenance or use that is not in accordance with TellusPower installation and maintenance procedures.
- Maintenance or use that is not in accordance with TellusPower installation and maintenance procedures.
- That has been subjected to incidental or consequential damage caused by defects of other components of the electrical system.

INSTALLATION GUIDE

DC quick charging stations Installation and operating instructions.

Please read all the instructions before installation and save them for future reference.

MANY THANKS!

Dear Customer!

Thank you for purchasing the Tellus Power Green product. Before using or operating this product, please read this manual carefully and keep it safely. The Company is not liable for any accidents caused by a breach of safety precautions or instructions in this manual. This product is live and should only be opened by instructed service personnel or a qualified electrician for service, maintenance or repair and fault handling to avoid electric shock.

ATTENTION

Our company will not assume any responsibility for power damage, personal injury, property loss or damage of charger caused by installation not in accordance with the instructions of this manual.

PLEASE NOTE

Tellus Power reserves the right to make change as necessary to comply with change in the industry and due to errors and omissions to ensure a safe and reliable installation.

Please call our customer support line if there are any questions related to installation or operation of this equipment.

"Please don't make assumptions, call us!"

CONFIDENTIALITY

The material contained in this document represent proprietary and confidential information pertaining to services and methods of Tellus Power. By reading this document you agree that the information shall not be disclosed outside of and shall not be duplicated, used, or disclosed for any purpose other than what it was created for.

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CRITICAL SAFETY

READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

WARNING

This unit is a high-powered electrical device and can be hazardous if improperly installed, serviced, or operated. Failure to follow procedures in this manual could result in extreme hazard to personnel and/or damage to the equipment and related infrastructure. In addition, the installation, service, and maintenance need to comply with local codes and the Authority Having Jurisdiction (AHJ).

IMPORTANT SAFETY INSTRUCTIONS

The symbols used are international icons used to depict various levels of caution when installation, servicing or maintaining the equipment. Same symbols will also appear on the equipment for identifying caution levels required when access certain areas of the charger.

	**DANGER**	High voltage danger label to keep people safe from electrical discharge, which could result in injury or potential death.
	**WARNING**	Warning icon represents hazard, that could result in severe injury or possibly death.
	**GENERAL CAUTION**	Caution icon represents a potential hazard or unsafe practice that could result in injury.

CRITICAL SAFETY

READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

SERVICE WARNING

There are no serviceable items inside the equipment. There is high voltage inside the equipment which could cause severe injury or death. Do not attempt to repair the charge station yourself. This can only be performed by factory qualified personnel.

CHARGING CABLE DAMAGE

Do not operate the charger if the charging cable is damaged or if here are exposed wires in the charging cord assembly. Shut off power at the electrical disconnect or at the breaker. Then immediately contact Tellus Power service. If there are any questions, please contact customer service.

SAFETY INSTRUCTIONS

Read the entire installation instructions before designing the installation and prior to installation.
This equipment should be installed by a journeyman level electrician. Local building codes need to be complied with. In most jurisdictions the installation of this equipment requires plan check, building and electrical permits. Verify with the local Authority Having Jurisdiction prior to starting construction.
The charging station relies on the grounding system for safety. All grounding instructions should be strictly adhered to as prescribed in this manual and any applicable electrical safety requirements, all local electrical safety codes, and NEC.

CRITICAL SAFETY READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

HIGH VOLTAGE EQUIPMENT:

This charging system contains both AC and DC high voltage circuitry and devices and should only be installed by a qualified electrician trained to work on high voltage, high current AC and DC systems.

ADDITIONAL CAUTIONARY NOTES

WARNING

Do not have power on while any of the maintenance doors are open unless proper personnel protection equipment is worn.
Only trained personnel should be working in this equipment while the doors are open, and the unit is powered on.

WARNING

There are high voltage and high-capacity energy storage components on this system. There are components and circuits that remain charged for some time (1 to 2 minutes) with high voltage power, even after main power is disconnected. Always test with a voltmeter before any maintenance or service is performed.

Only Tellus Power authorized personnel are allowed to perform product repairs.

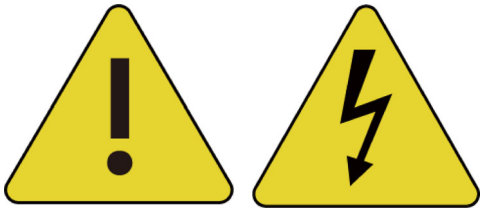
FEATURE DETAIL

BIdirectional AC-DC Converter are connected to the control computer via a CAN interface. Soft switching technology, high efficiency, good electromagnetic compatibility, with input / overvoltage protection, output overcurrent protection, output overvoltage protection, output short-circuit protection, over-temperature protection and alarm function are the main features. The power modules can be interconnected in n+1 parallel operation.

CABLE CROSS SECTIONS AND ELECTRICAL CONNECTION

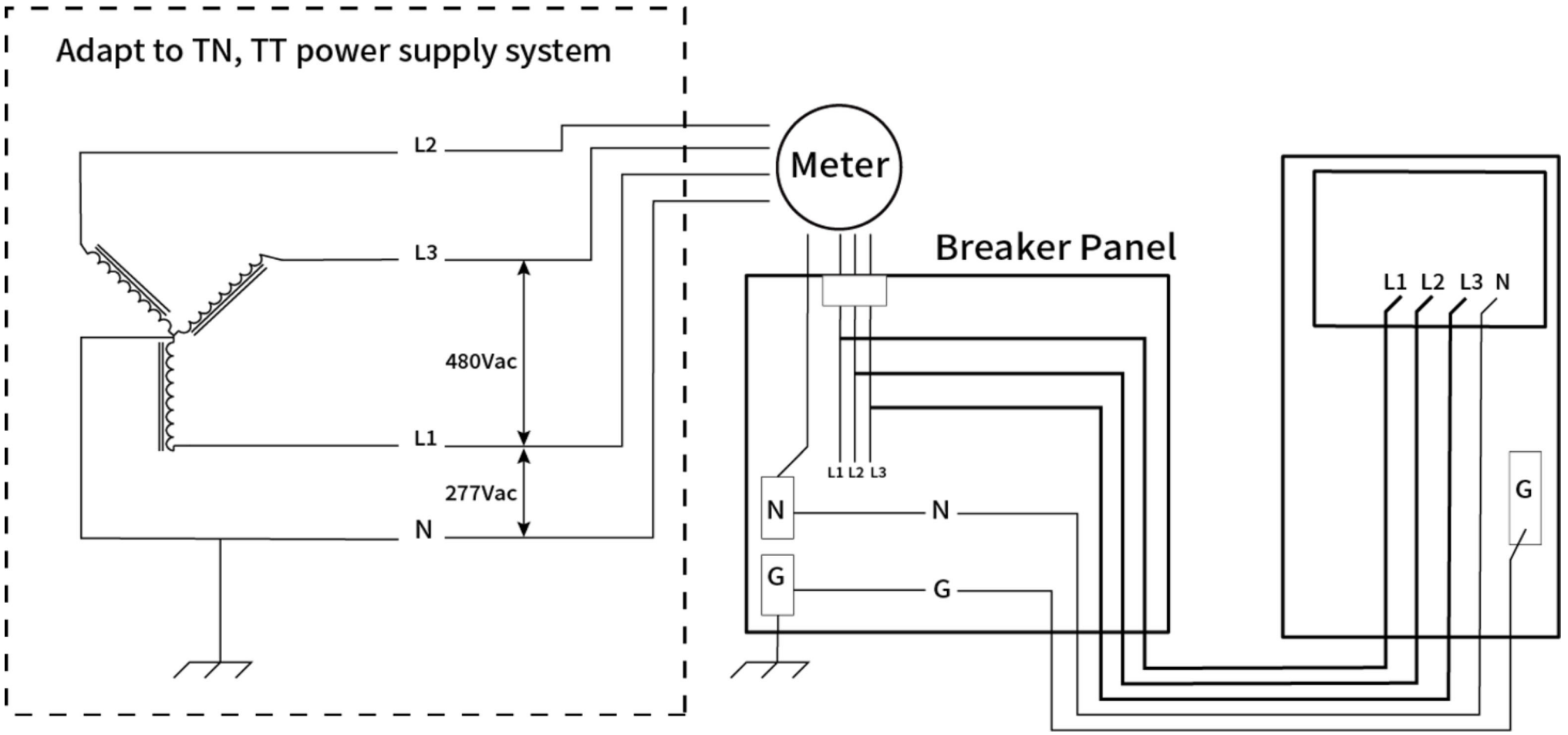
The cable cross-sections for the 3-phase AC input comply with the usual NEC installation instructions.

It is recommended to use copper wire.
The wire gauge should meet NEC requirement.



Danger! The electrical connection may only be carried out by qualified personnel danger to life "!

ADAPTED GRID SYSTEM



INSTALLATION OVERVIEW

Electrical Input Requirements	Input voltage: 480 Vac (3 Phase + Neutral + Earth), 60Hz
Location	This charging stations has 4 doors i.e. Front, Rear, Left and Right. Clear 30" distance on the front and rear sides and 24" on left and right side of a charger to be maintained for air circulation for cooling and opening panel for maintenance.
	Flat Concrete Base with vertical gradient not more than 5% will be provided and a provision for electrical service wires to exit the concrete pad in the location as defined in this document.
	Charger Dimensions (L X D X H): 35.22" ×29.51" ×73.44"
Mounting Pad	Mounting pad shall be of concrete cement with approximate dimensions Length 37.4", Width 34", Height 24.62", to accommodate the weight and dimensions of the base. Use expansion bolts to secure the charger to the concrete mounting pad.
	For ADA requirements, the concrete mounting pad shall not exceed 1.00 inches above the plane of the parking lot.
	For relocation / lifting – Forklift can be used, provision has been made for this.

INSTALLATION OVERVIEW

Barricade (Bollards)	Suitable bollards should be provisioned to restrict approach of EV to the charger. This shall be at in accordance with local code.
Cables	Input Cables must be Copper (3P+N). Flexible copper is preferred. Please see the table below in next section for the cable gauge.
	Depending on the situation and cable type, the cables must be embedded in the ground with proper cable duct.
Grounding	Reliable protective grounding must be provided. It is recommended to have separate dedicated ground exclusively for the charger considering the safety aspects. The ground resistance should be less than or equal to 4Ω. Copper cable of in accordance with NEC shall be used to connect charger housing to externa ground.
Breaker	Breaker (3P+N) with suitable current capacity depending up on the charger rating to be provided. This shall be in accordance with NEC, typically 1.25 X Full Load Amperage.
Miscellaneous	Copper lugs (Flat type) for input cable and earth cable should be provided based on size of cable.

INSTALLATION OVERVIEW

Additional notes	Do not let the flammable, explosive or flammable materials, chemicals, flammable vapors, and other dangerous goods close to charging station.
	In the areas of floods, heavy rains, storms, snow, or similar harsh weather conditions, Tellus Power recommends a canopy for the charger for protection. The charger is IP54.
	Confirm that your installation site has a load capacity sufficient to support this equipment.
	Charging cable length optional.

ADA CONSIDERATION

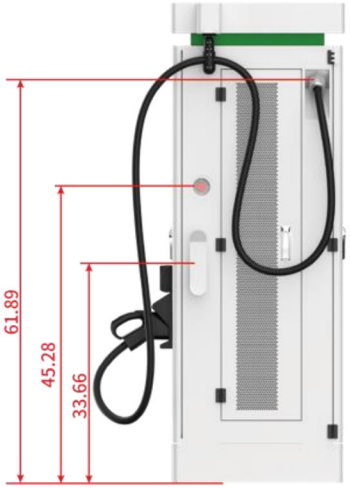
This equipment has been designed to meet ADA requirements when installed as prescribed in this manual and in accordance to the STANDARDS FOR ACCESSIBLE DESIGN for Americans with Disabilities document, 2010 ADA Standards for Accessible Design:
http://www.ada.gov/2010ADAstandards_index.htm
Parking space, allowances for wheelchair movement, charger, bollards, and parking stops are defined in several publicly available EV charger installation recommended practices documents incorporating the ADA requirements. http://www.ada.gov *For information about the ADA, including the revised 2010 ADA regulations, please visit the Department' s website www.ADA.gov; or, for answers to specific questions, call the toll-free ADA Information Line at 800- 514-0301 (Voice) or 800-514-0383 (TTY).

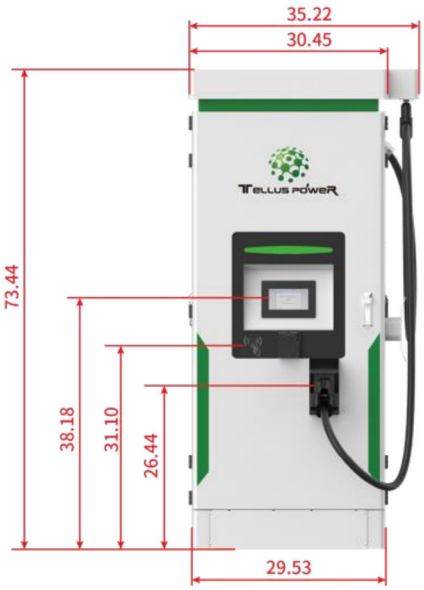
BOX CONTENTS

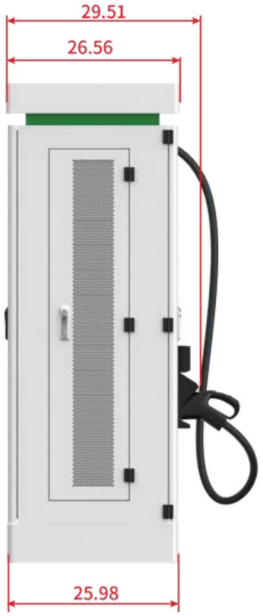
Item	Quafitity
Charger	1
Bolt M14 *100	6
Charging Card	3
Key	2
Factory Test Report	1
Matching socket or hex wrench (Match according to the molded case circuit breaker model)	1
Forklift damper	2
Screws M5 *8	8
Certificate	1

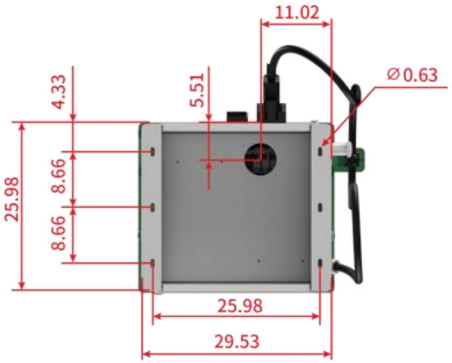
Bolt M14 *100	Matching socket or hex wrench
	
Charging Card	**Forklift damper**
	
Key	**Screws**
	
Factory Test Report	**Certificate**
	

OUTLINE OF DRAWING



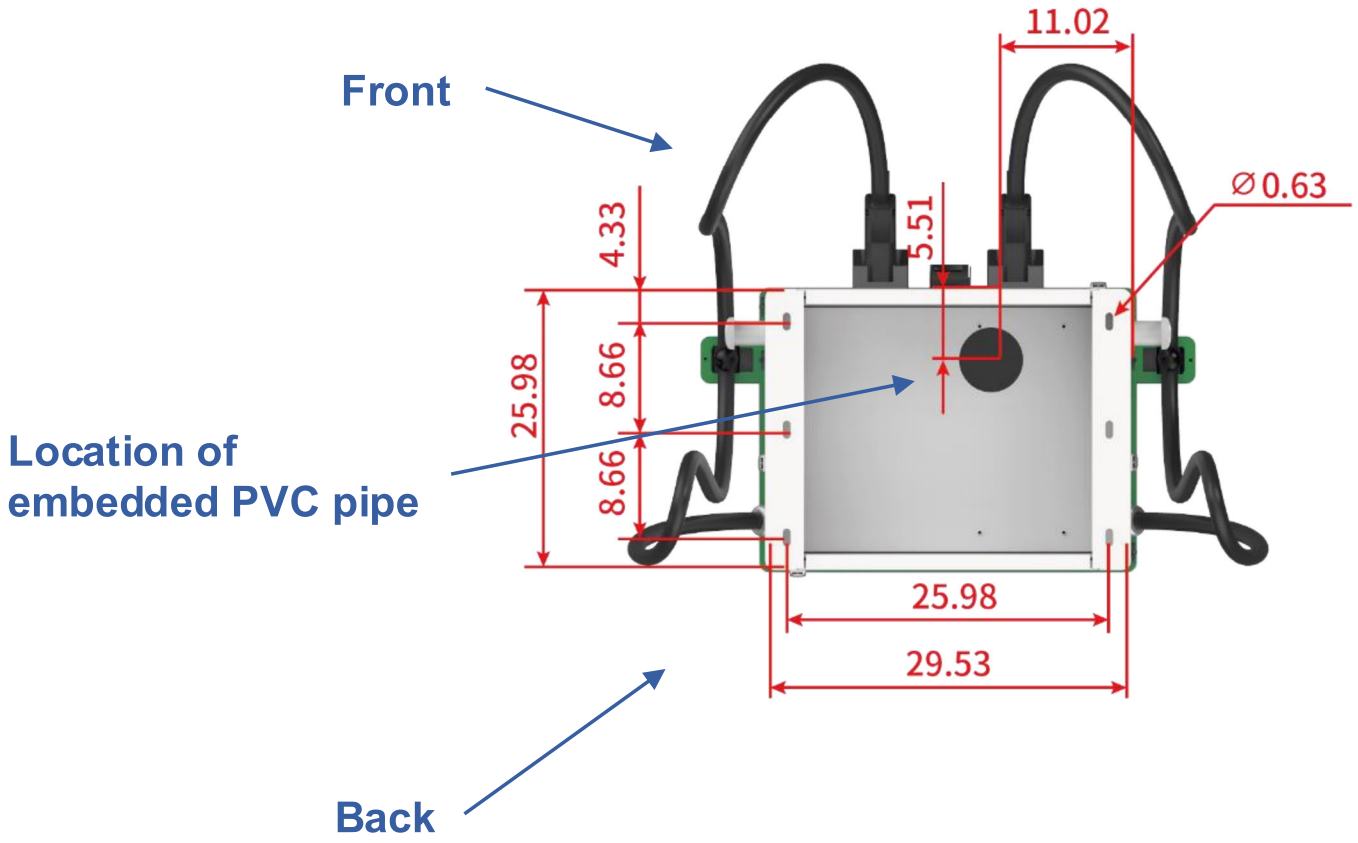




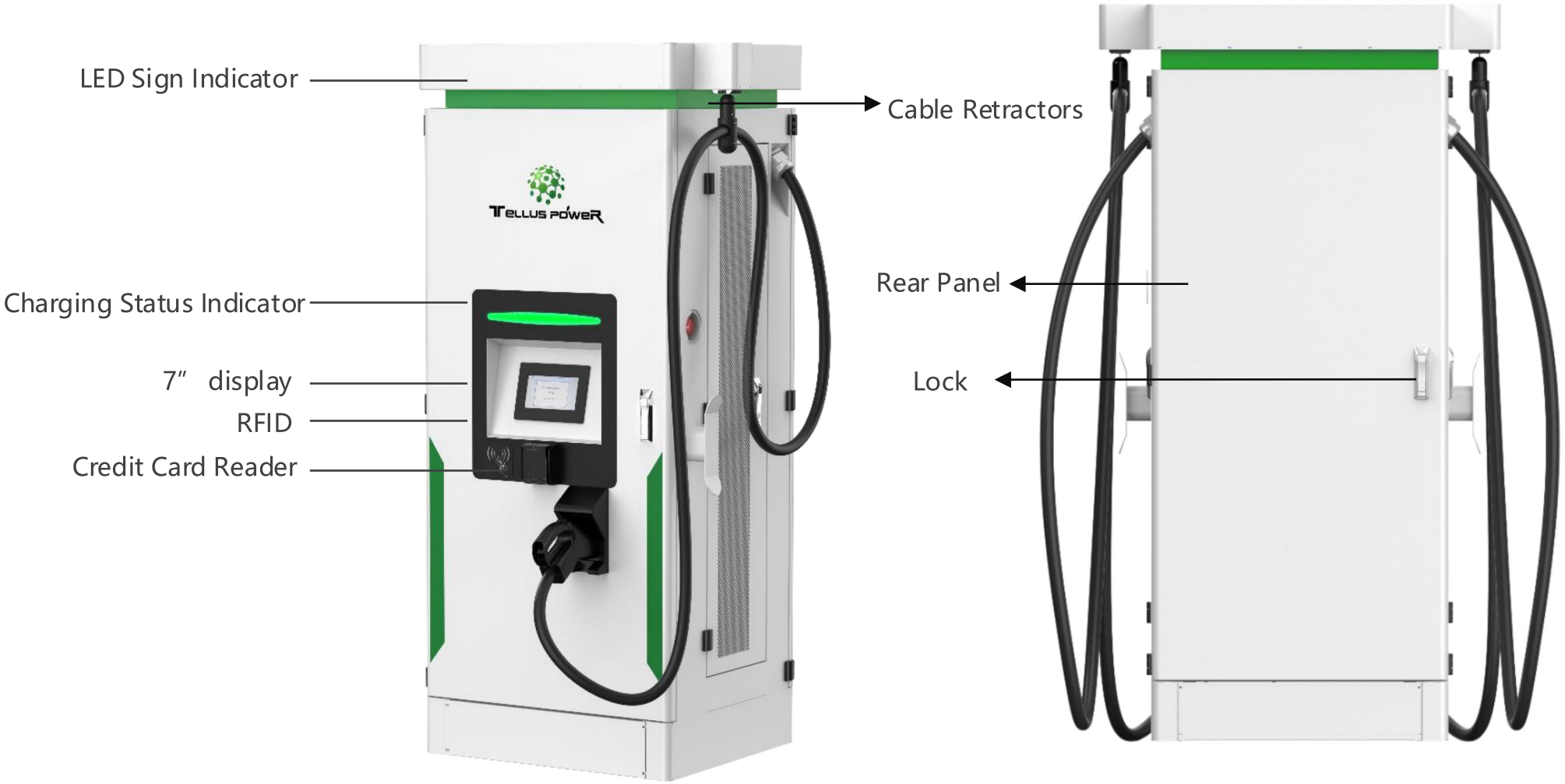


OUTLINE OF DRAWING

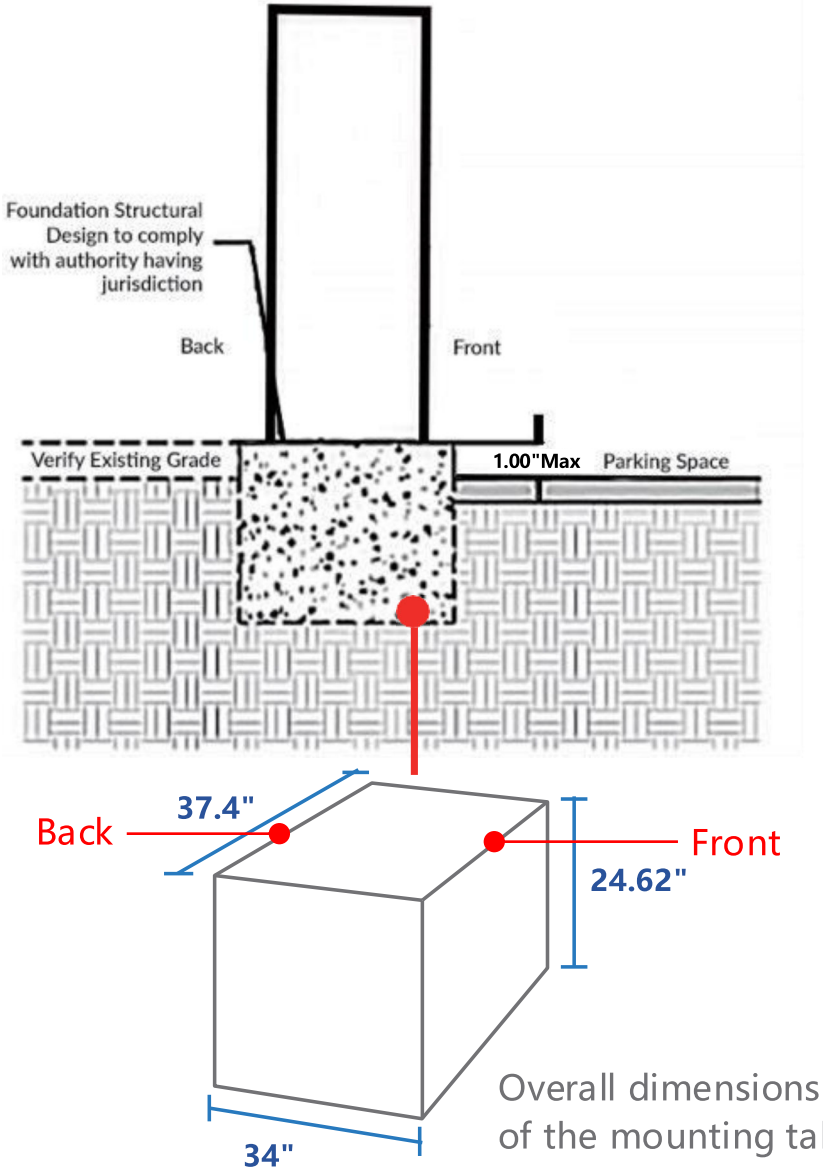
Before making the concrete pad, determine the position of the pre-embedded PVC pipe according to the position shown in the figure to facilitate later wiring.



STATION ANATOMY



MECHANICAL INSTALLATION



Overall dimensions of the mounting table

CONCRETE PAD

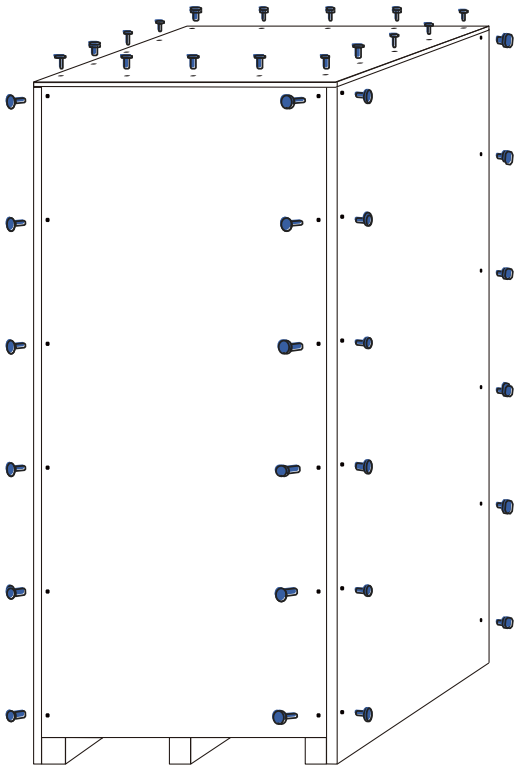
Concrete pad using 3,000 to 4,000 psi concrete should be used. Electrical for AC power should be position such that it exits the concrete pad at the Main AC Power Line Opening.

Important things to note:

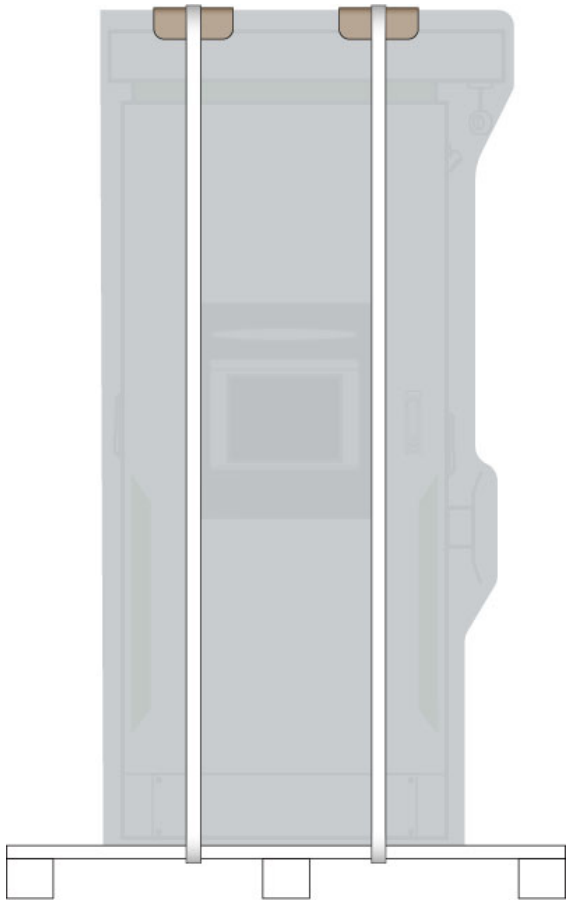
- When making the installation platform, a PVC pipe with a diameter of 100mm is pre-buried, and steel wires are reserved in the PVC pipe for the convenience of wiring.
- The reserved position of the PVC pipe corresponds to the position of the cable inlet at the bottom of the charging pile.
- The dimensions of the concrete foundation will need to be determined according to the local jurisdiction. The reference foundation is 23.62" deep below ground, Foundation fabrication uses steel bars in accordance with relevant standards. Recommended 5/8" threaded rebar . The concrete platform should be 1.00" above ground, any more than 1.38" will cause the charger to control above the ADA compliance maximum and may cause the inspection to fail and the foundation may need to be lowered to Meets ADA guidelines.

STEP 1 UNPACK

01. Remove the screws around and at the top of the packing box.

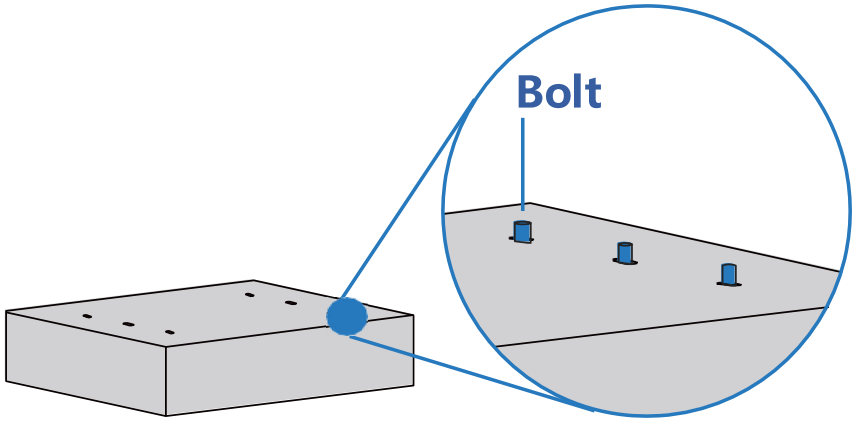


02. Untie the straps that fixes the charging station and remove the vacuum bag and plastic film.

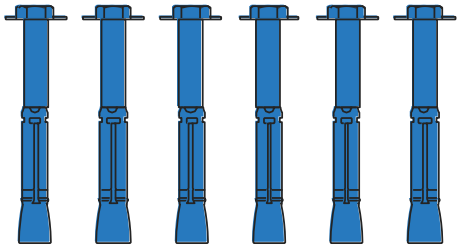


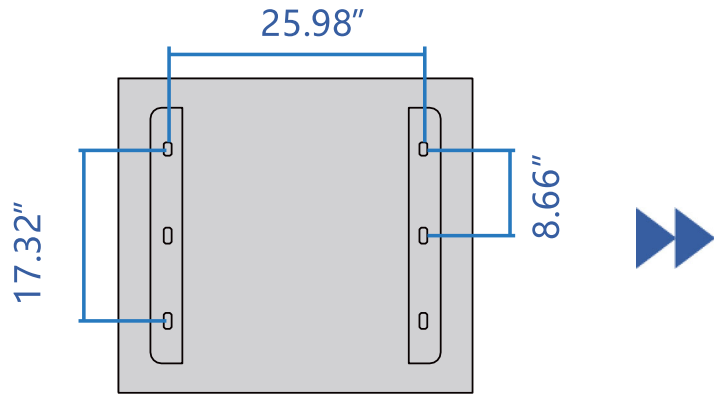
STEP 2 START INSTALLATION

03. Drill holes on the mounting platform according to the bolt hole size at the bottom of the charging station, and pre-install the expansion bolts at the grounding holes.

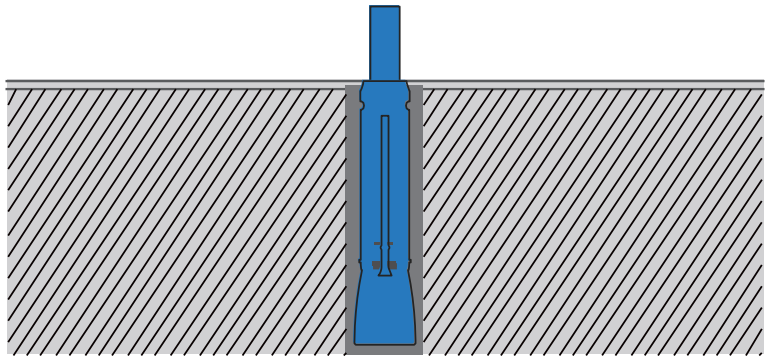


Bolt M14*100 × 6





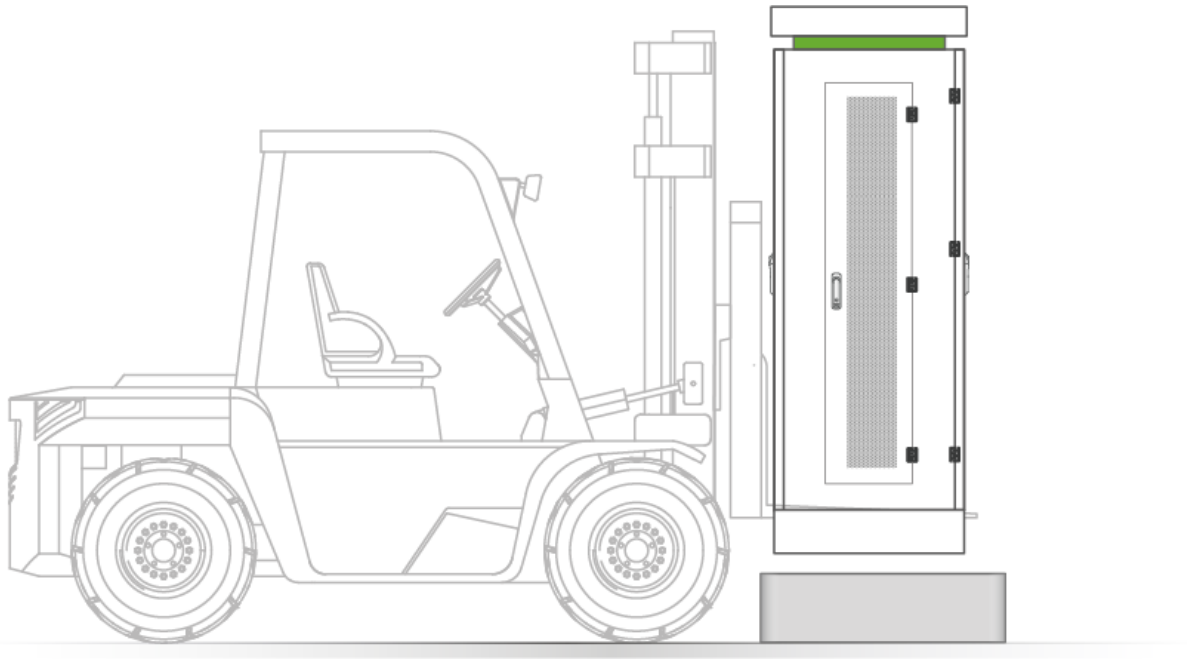
1. The ground holes are 0.71″ in diameter and 4.33″ — 4.72″ in depth.



2. Remove the nut and gasket, and put the expansion bolt body into the hole (as shown in the figure).

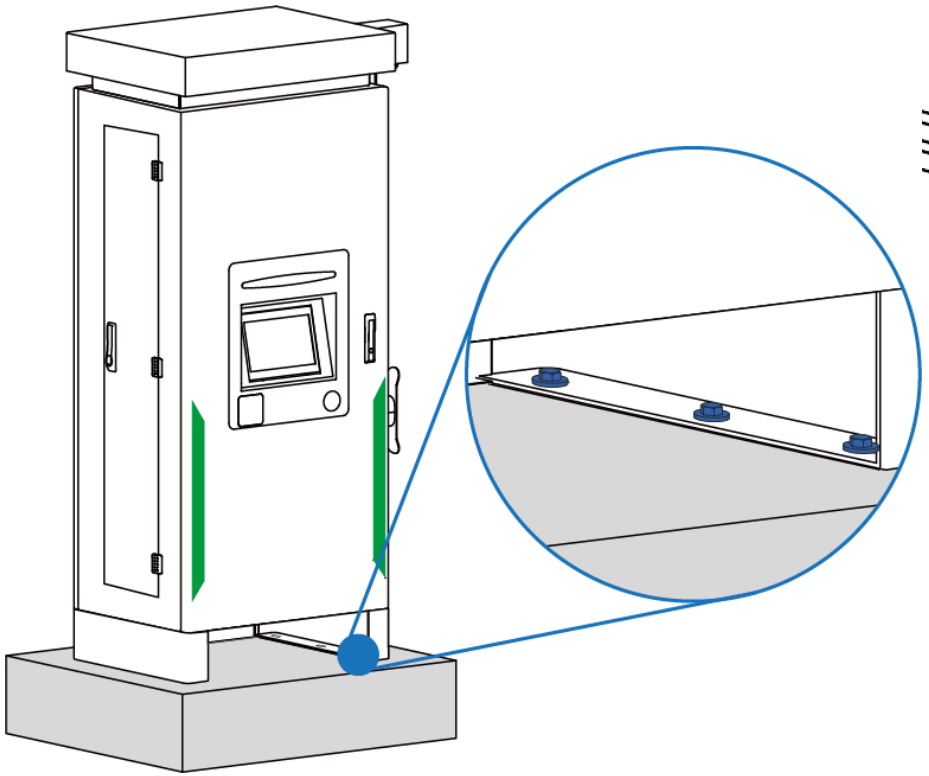
STEP 2 START INSTALLATION

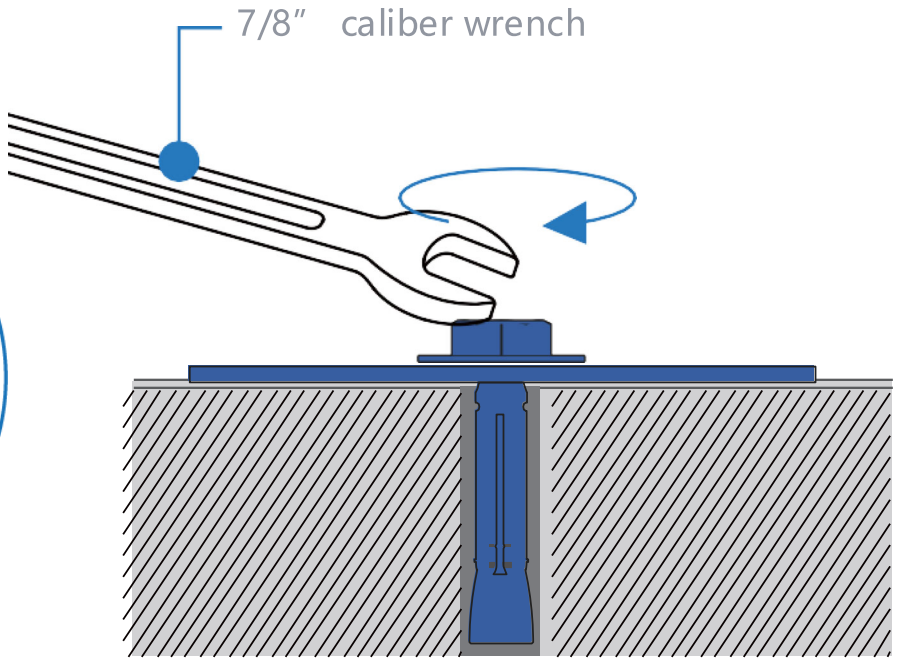
04. Use a forklift to move the charging station to the installation site.



STEP 2 START INSTALLATION

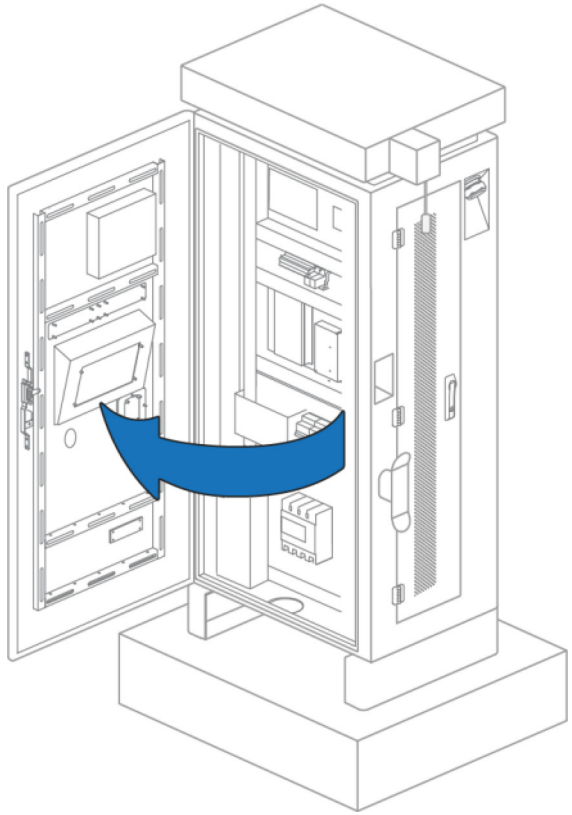
05. Tighten the expansion bolts after placing the charging station at the installation site.





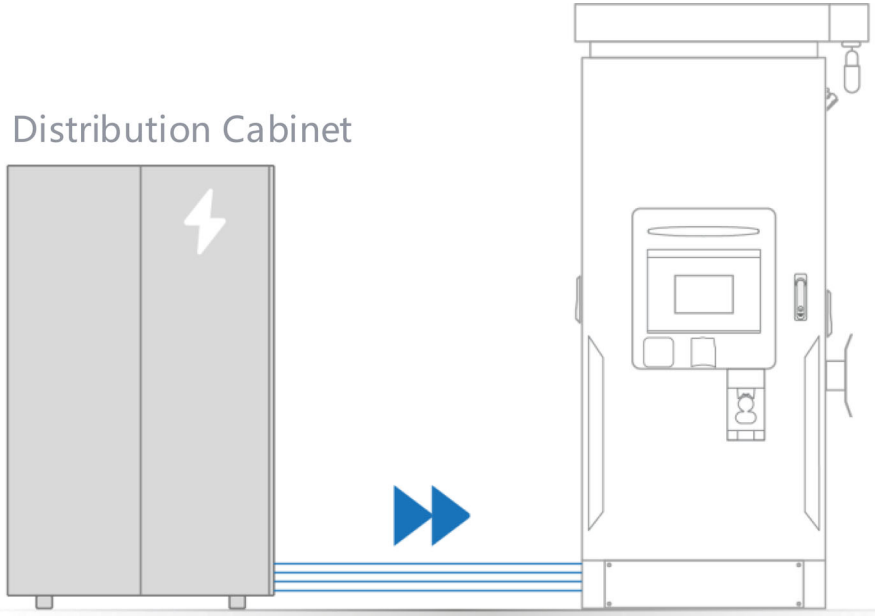
STEP 3 WIRING

06. Open the front door of charging station.



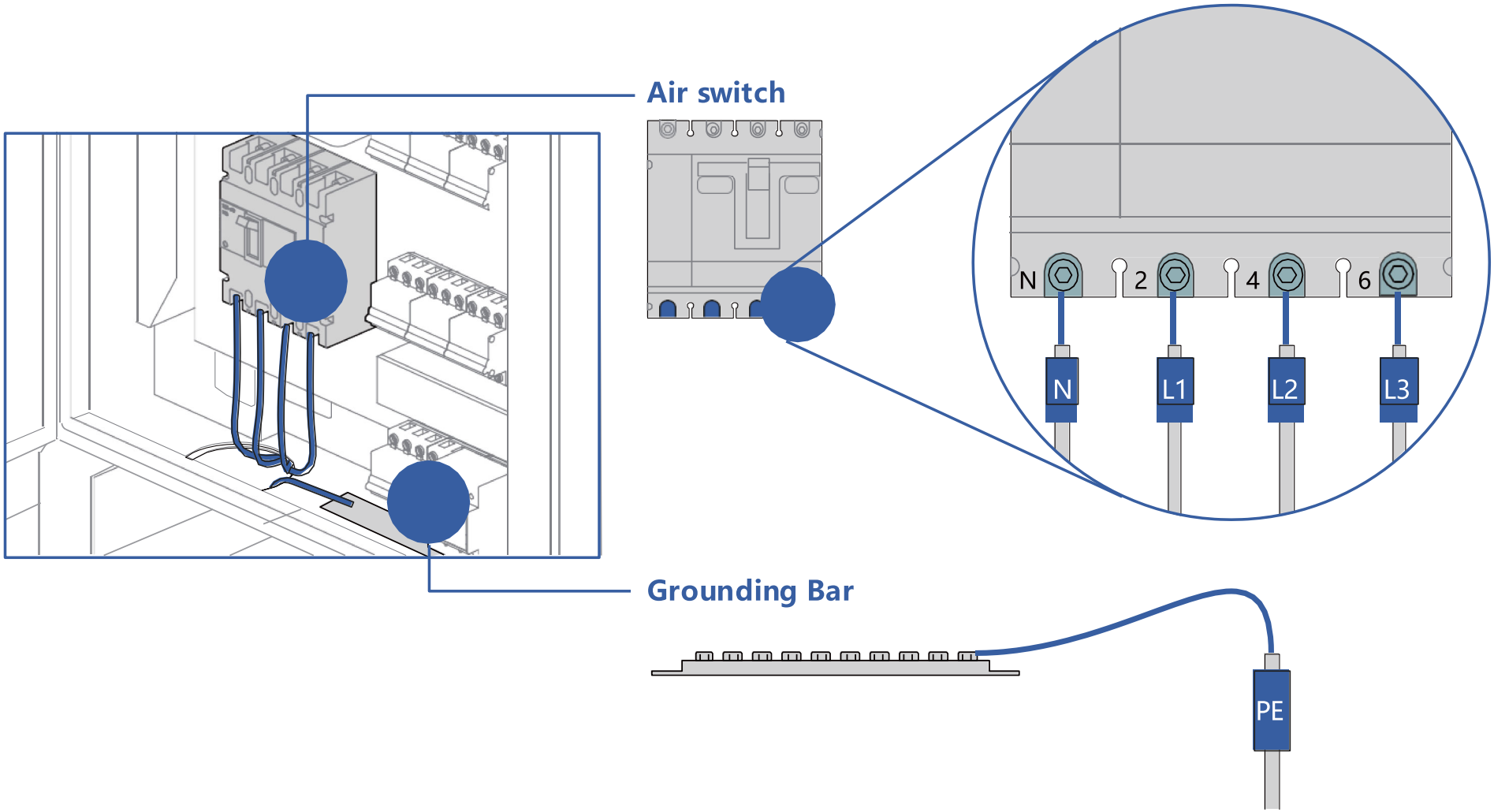
07. Start connecting wires.

The incoming line is connected from the power distribution cabinet to the molded case circuit breaker and grounding bar of the charging station.



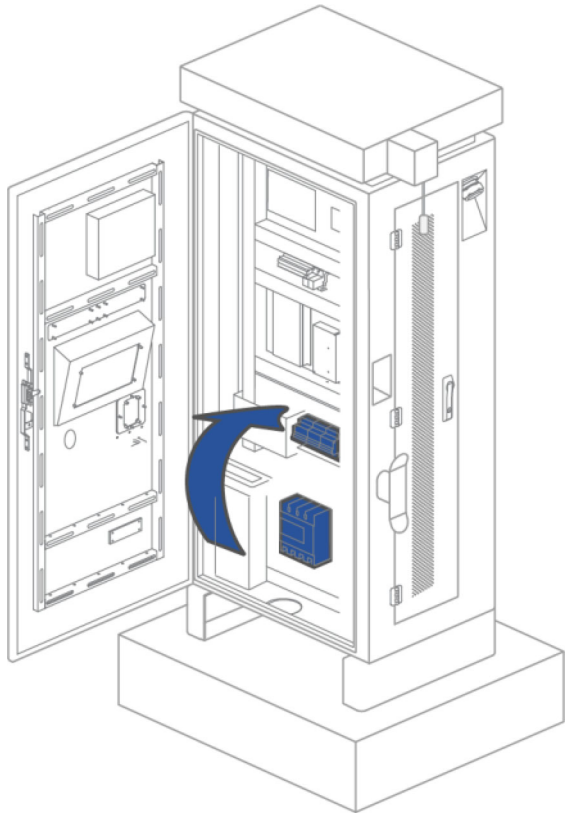
STEP 3 WIRING

08. The inlet wires are connected to the MCCB and the grounding bar through the opening at the bottom of the charging station.



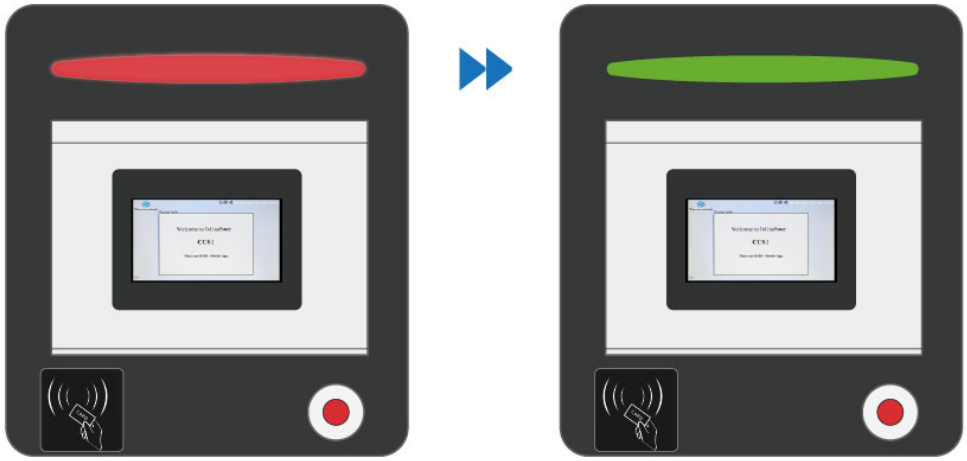
STEP 4 PREPARATIONS BEFORE STARTING

09.Turn on all switches in the charging station.



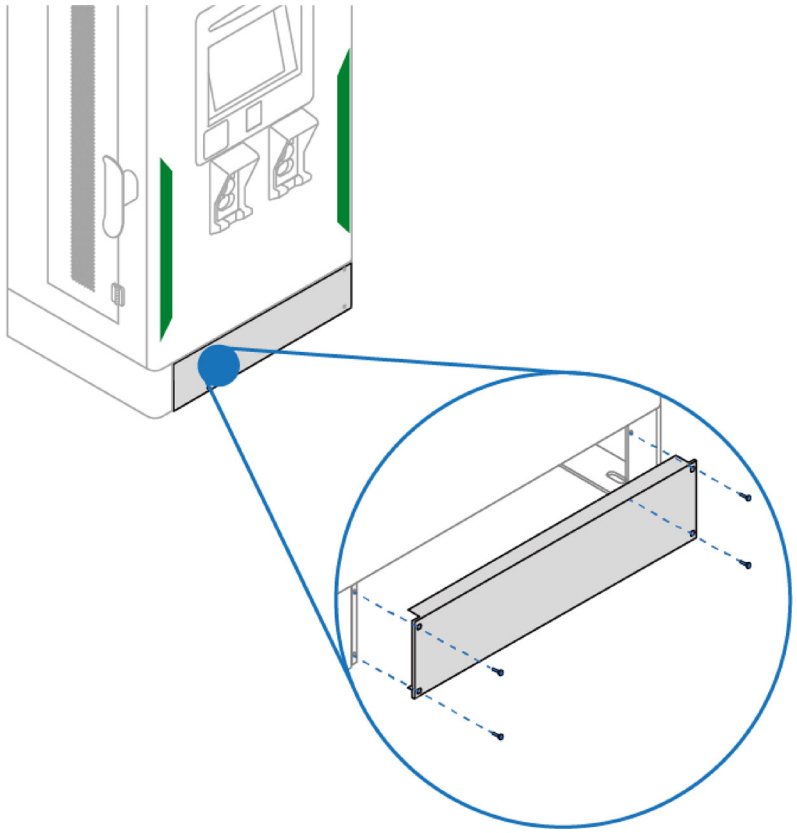
STEP 4 PREPARATIONS BEFORE STARTING

10.Wait for the front panel indicator to change from red to green.

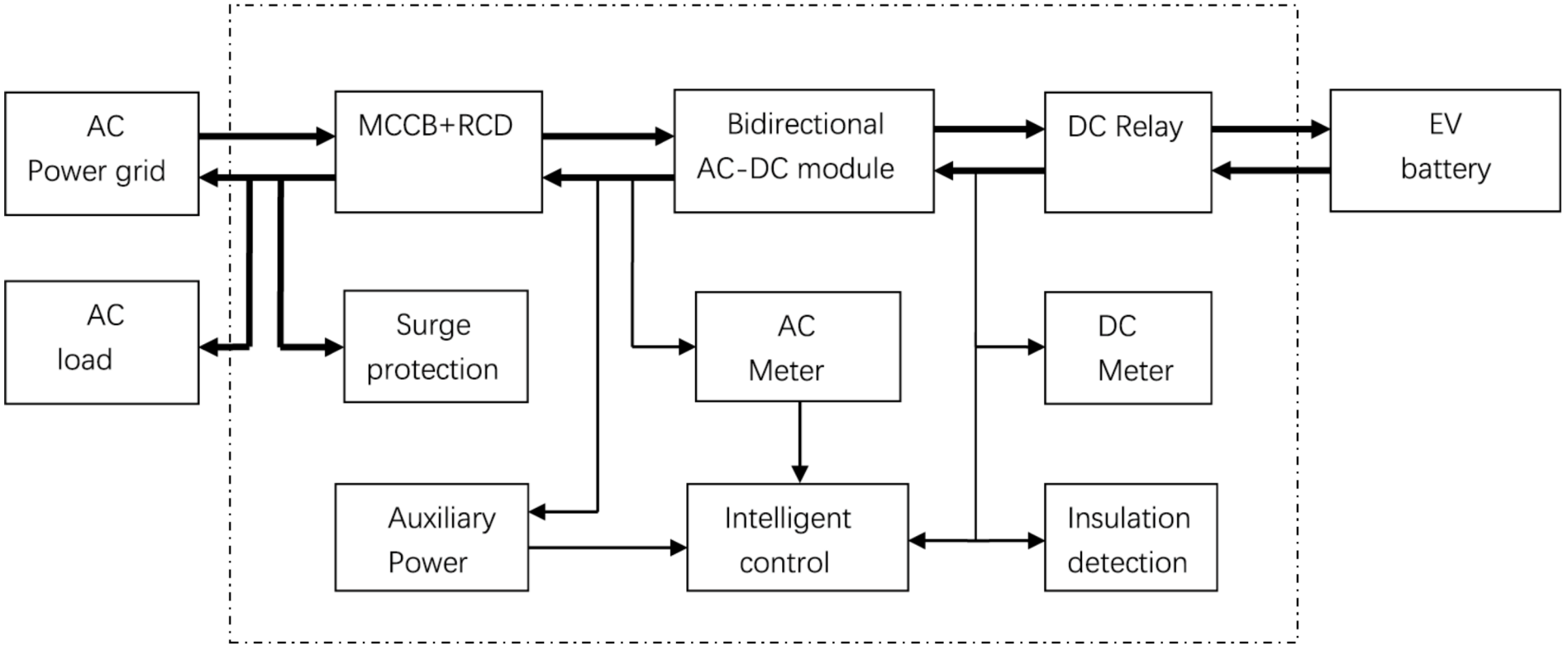


11.Install the front and rear Forklift dampers.

Screws M5 *8



INTERNAL SCHEMATIC



FUNCTION DESCRIPTION

Main control

1. DC Charging Control: During the DC charging process, the main control board dynamically adjusts the1.charging parameters (voltage, current, etc,) according to the data set by the vehicle's battery management system.
2. Charging information: During charging, the user will be shown data on how many volts and amps are being charged, the kilowatt hours already charged, as well as the current charging status of the vehicle’ s battery and remaining charging time.
3. Discharge information: During the discharge process, the user will see the vehicle battery voltage, SOC, discharge current, discharged kWh, discharge time and other data.
4. Fault monitoring: Both input and output faults such as e. Over-undervoltage, overload current, main switch, contactor, charging current and charging voltage, fault currents as well as separation monitoring of the charging connection, communication interruption, etc.
5. Security protection Charger has a leakage current monitoring and lightning protection monitoring.

Control board functions

1. Display of the output function:

a. Real-time display of charging or discharging process
b. Displays error messages.
c. Can display the relevant user information during the loading process (only when connected to a back-end management system)

FUNCTION DESCRIPTION

2. **OCPP communication interface.**
   The Linux control unit communicates with a connected backend system via OCPP 1.6 protocol.
3. **Parameter settings.**
   Underutilized service personnel, password-protected, can configure the machine parameters in the settings environment.
4. **Self-test.**
   a. The charging station performs a self-test at power-on which checks the power supply, system units anda.communication intertaces, if the charging station is connected to a backend server, the time is also svnchronized with the server and the stored charging information is transmitted to the server and stored.
   b. Detected error information is stored.
5. **Data transmission and storage.**
   a. Data transmission
      The charging station optional 4G, which stores the charging status and the cache data when connected to a backend server transmits to the backend server via OCPP 1.6
   b. Storage
      The transaction data is recorded in the internal memory.
6. **Billing function (optional).**
   The charging station sends the consumption information to the server in order to be able to create billing when using the Tellus power backend system.

FUNCTION DESCRIPTION

7.Control function

The load monitoring unit provides a variety of control functions, e.g. constant current limit, voltage, power, etc.

8. Event logging feature

List of loading errors, start/end time, etc. are real-time recordings, data memory with hold function in case of power failure.

9. Administrator

The charging station can be parameterized by the administrator-password protected. Setting parameters. Eg IP address, charging current limit, voltage limitation etc.

10.Zeitsynchronisation

List of loading errors, start / end time, etc. are real-time recordings, data memory with hold function in case of power failure.

Operating instructions

- If the charging station indicates a fault, charging is not possible, Please contact the employees of themanufacturer or operator.
- In networked mode, the system detects if the RFID user card has enough credit, If there is not enough crediton the card, this message will be shown on the display and charging will be denied.

FUNCTION DESCRIPTION

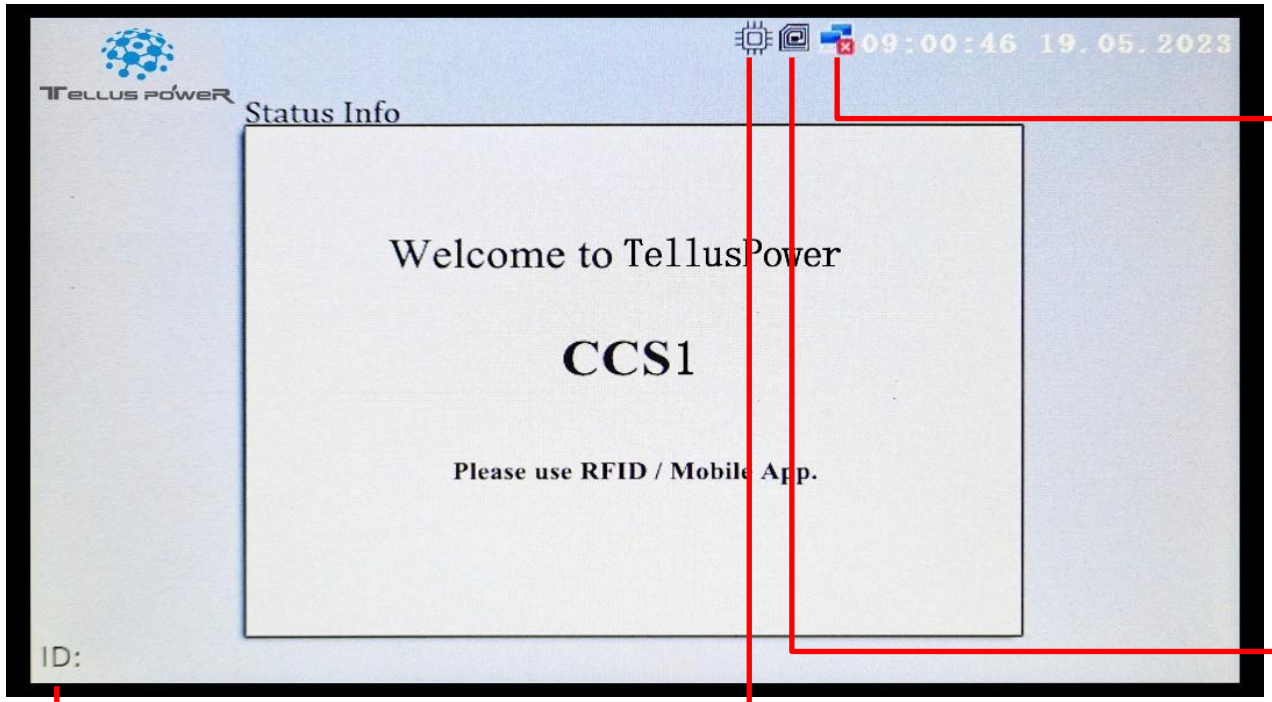
- Please pay attention to the instructions of the charger
- The charging cable can only be removed from the vehicle charging socket if it has been unlocked on the vehicle before.
- In an emergency, press the emergency stop switch! The charging process is interrupted immediately, and a message appears on the screen.

Emergency Stop Switch Instructions

- For initial start-up, check that the emergency stop switch is not activated.
- If an abnormal condition occurs, such as Fire or electric shock, immediately press the emergency stop button.

CHARGER SETTINGS

For models with touchscreen is configured via this : (only after previous training by the manufacturer)



Click the "logo" to enter thebackground login interface.

The icon indicates if the cradle is connected to a server network if no network is connected, the station works as a stand-alone device with TellusPower RFID cards.

The network is connected, it can only be unlocked with registered RFID cards.

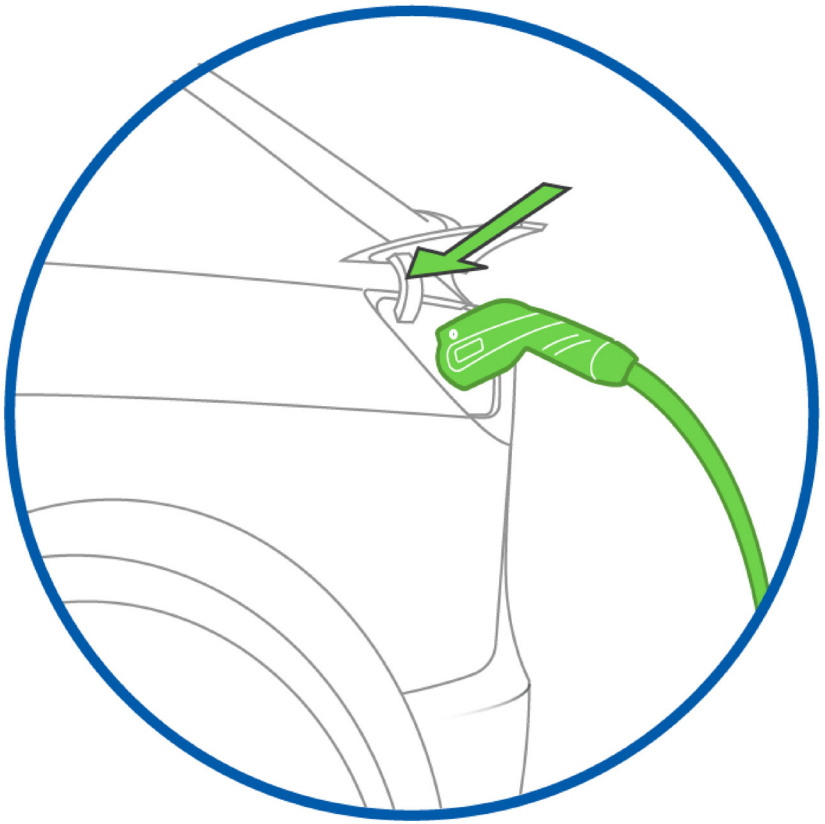
Card version

CM board

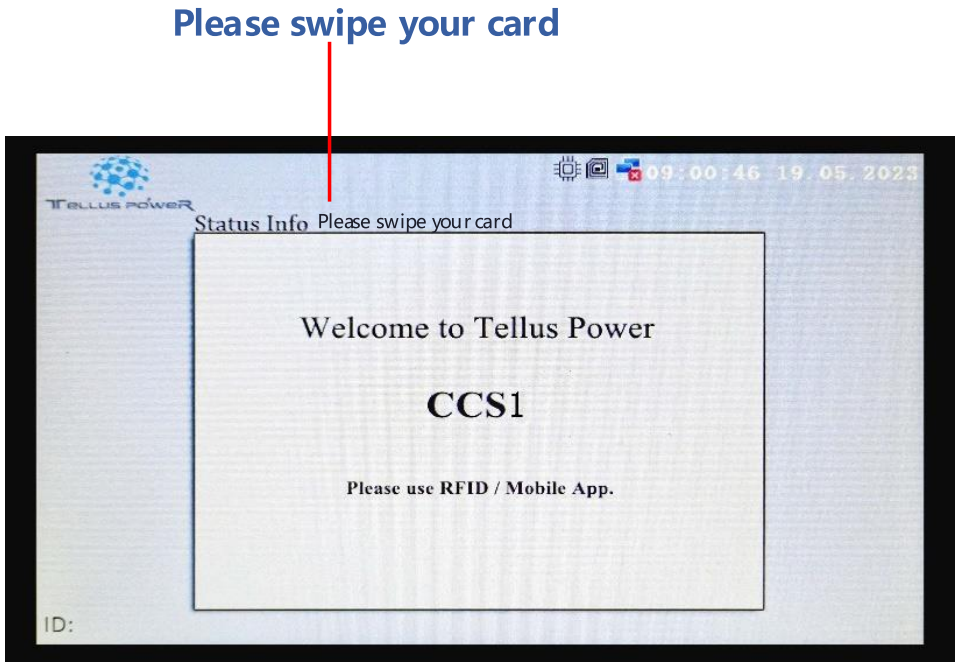
The lower left corner of the screen shows the device number.

HOW TO START A CHARGING SESSION

01. Please select the connector compatible to your EV. Plugin the connector.



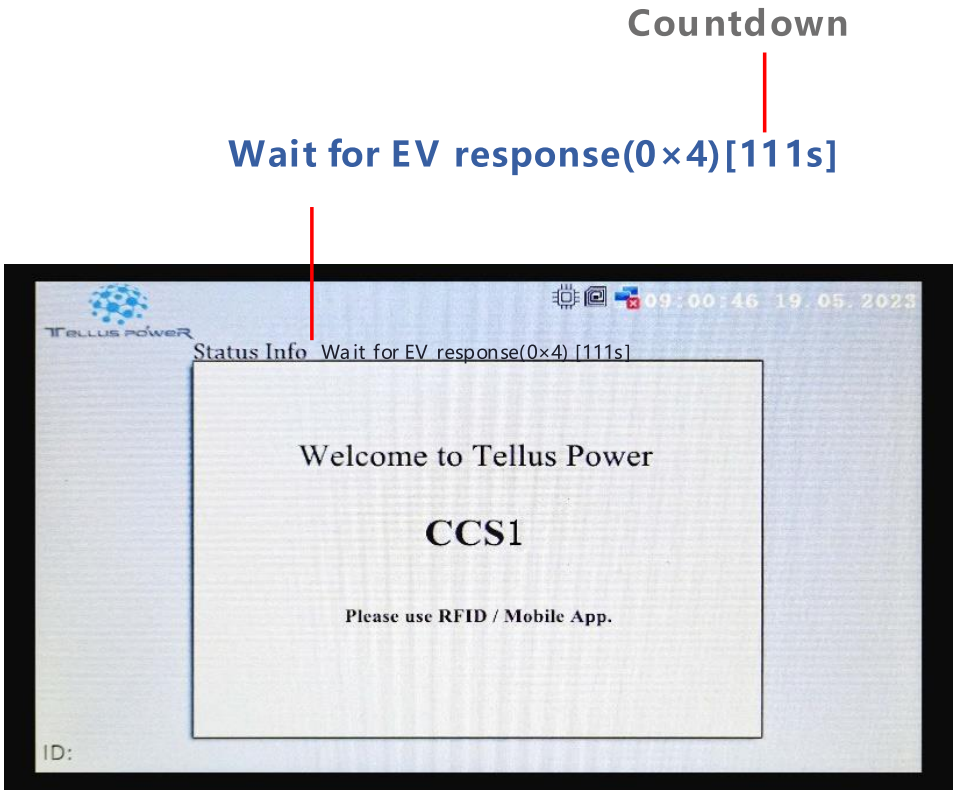
02. After the charging cable is plugged in, it will display "connected", click "connected".



HOW TO START A CHARGING SESSION

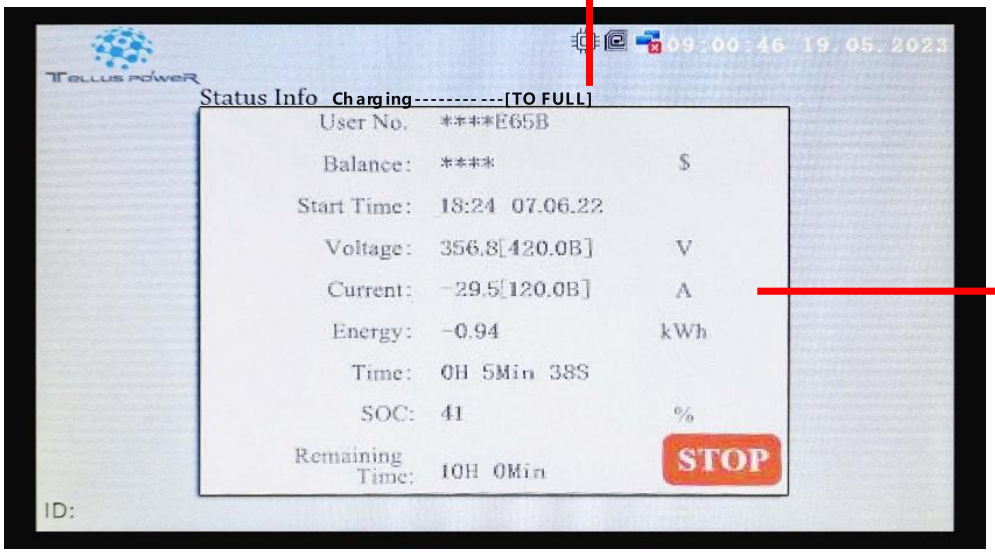
3. Swipe the card.

4. wait about 30 seconds,then start charging.



HOW TO START A CHARGING SESSION

5. Start charging.



Charging----------[TO FULL]

User No. :ID card number

Start Time :Date and time to start charging

Voltage :Real-time voltage display

Current :Real-time current display

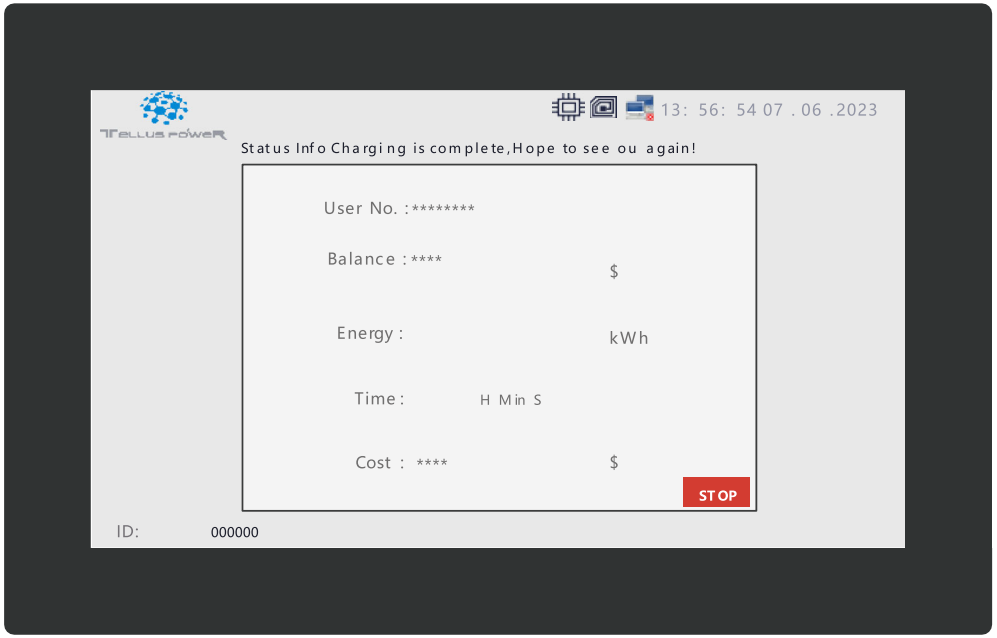
Time :Display charging time

Remaining Time :The time it takes to fully charge

HOW TO START A CHARGING SESSION

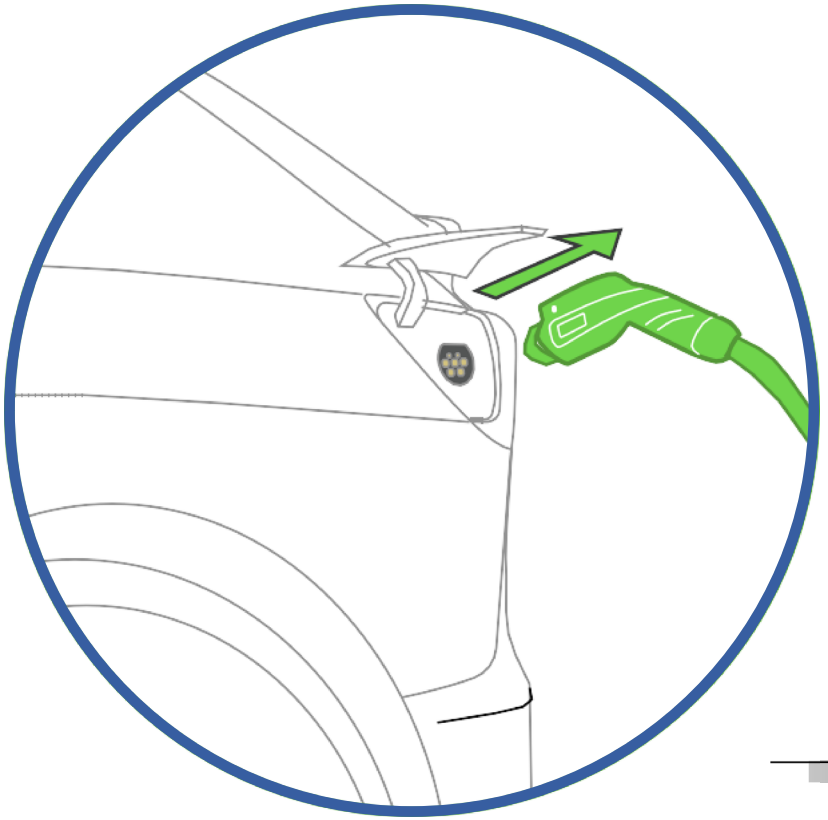
6. Swipe the card to end charging. (Notice! Only after swiping the card can the charging gun be removed from the car)

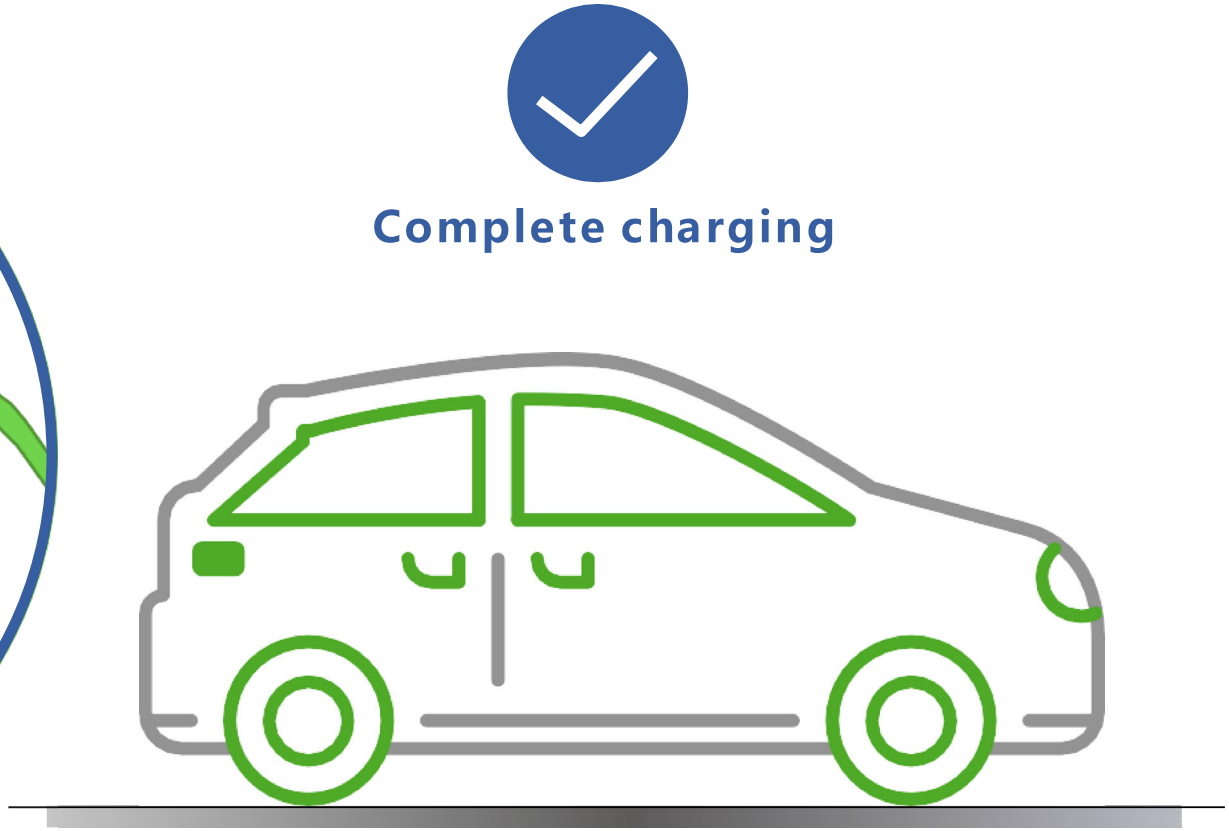
Swipe the card to end charging, or click "stop", the interface will jump to the end interface, and the interface will display charging information and deduction information.



HOW TO START A CHARGING SESSION

7. Take the charging cable out of the car.





MAINTENANCE AND SERVICE

DANGER

READ AND FOLLOW THE "SAFETY CONCERNS" AT THE BEGINNING OF THIS MANUAL BEFORE USING THIS DEVICE.

EV Charging Stations require regular maintenance beyond installation to ensure the quality of the vehicle's charge, and the continued value of your electric vehicle. Whether you're installing a personal EV charger, or a public one for use, eventually you will require repair or maintenance services to keep your system working without flaws.

MAINTENANCE PRECAUTIONS

Each of the capacitors in this device have a high voltage for a time after shutting off the input power supply. Allow 1 minute after powering down before servicing internal components.

MAINTENANCE ITEMS

Perform periodic checks every 3 to 6 months based on the site conditions and the usage of the charging station.

1. Check the input voltage and ensure it is within the acceptable limits.
2. Check the Ground / Earth resistance and ensure it is within the acceptable limits
3. Clean the Air Filter periodically
4. Make sure that Power Module lights are blinks green
5. Ensure the charging cables are not worn out and gun pins are clean.
6. Make sure all the air-cooling fans are working normally.
7. Check for loose connections in grounding, MCCB, busbar, contactor, and MCB terminal screws.
8. Check if the RCCB function is working properly.
9. Periodically apply lubricant to the keyhole of the door lock.

MAINTENANCE AND SERVICE

VISUAL CHECK ITEMS

1. **Check for abnormal sound from running fans and power units.** If there is abnormal sound, Please don't make assumptions, call us! for further assistance.
2. **Check for abnormal odor, changes of inner materials, corrosion, anomaly in appearance, etc.in this device.** If there are any anomalies, Please don't make assumptions, call us! for further assistance.
3. **Check for dust and dirt in this device regularly.** The air filters on the doors can be removed and cleaned using a vacuum cleaner or air blower. The cabinet can be cleaned using a vacuum cleaner. The dust on the components can be cleaned using a soft cloth. Please pay extra attention while using the vacuum cleaner, it should not apply pressure on the control boards or any components.

REPLACEMENT OF FIXED-LIFE COMPONENTS

To prevent the device from failure due to worn out components, it is necessary to replace the components before they reach the end of their lifespan. Use the following replacement intervals as a guideline for the estimate of the total running time. Please don't make assumptions, call us! for further assistance.
when you replace the parts.

- Intake and exhaust air filters (if present): Approximately three (3) years. The period depends upon the site conditions.
- Please keep in mind that the replacement interval of each part can vary depending on, for example, the usage environment of the device.

TROUBLESHOOTING

ERROR CODES

If an error occurs, check the nature of the error by referring to following "Error Code List" and take appropriate actions according to instructions by the manufacturer.

ERROR CODES	DESCRIPTION
flag0	Emergency stop press
flag1	Insulation test failure
flag2	The communication of insulation detector is faulty
flag3	Module communication failure
flag6	Meter communication failure
flag11	Charging gun overtemperature fault

INSTALLATION GUIDE

DC quick charging stations Installation and operating instructions.

Please read all the instructions before installation and save them for future reference.

MANY THANKS!

Dear customer!
Thank you for purchasing the TellusPower product. Before using or operating this product, please read this manual carefully and keep it safely. The Company is not liable for any accidents caused by a breach of safety precautions or instructions in this manual. This product is live and should only be opened by instructed service personnel or a qualified electrician for service, maintenance or repair and fault handling to avoid electric shock.

ATTENTION

Our company will not assume any responsibility for power damage, personal injury, property loss or damage of charger caused by installation not in accordance with the instructions of this manual.

PLEASE NOTE

TellusPower reserves the right to make change as necessary to comply with change in the industry and due to errors and omissions to ensure a safe and reliable installation.

Please call our customer support line if there are any questions related to installation or operation of this equipment.

"Please don't make assumptions, call us!"

CONFIDENTIALITY

The material contained in this document represent proprietary and confidential information pertaining to services and methods of TellusPower. By reading this document you agree that the information shall not be disclosed outside of and shall not be duplicated, used, or disclosed for any purpose other than what it was created for.

TABLE OF CONTENTS

TABLE OF CONTENTS

CRITICAL SAFETY

READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

WARNING

This unit is a high-powered electrical device and can be hazardous if improperly installed, serviced, or operated. Failure to follow procedures in this manual could result in extreme hazard to personnel and/or damage to the equipment and related infrastructure. In addition, the installation, service, and maintenance need to comply with local codes and the Authority Having Jurisdiction (AHJ).

IMPORTANT SAFETY INSTRUCTIONS

The symbols used are international icons used to depict various levels of caution when installation, servicing or maintaining the equipment. Same symbols will also appear on the equipment for identifying caution levels required when access certain areas of the charger.

	**DANGER**	High voltage danger label to keep people safe from electrical discharge, which could result in injury or potential death.
	**WARNING**	Warning icon represents hazard, that could result in severe injury or possibly death.
	**GENERAL CAUTION**	Caution icon represents a potential hazard or unsafe practice that could result in injury.

CRITICAL SAFETY

READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

SERVICE WARNING

There are no serviceable items inside the equipment. There is high voltage inside the equipment which could cause severe injury or death. Do not attempt to repair the charge station yourself. This can only be performed by factory qualified personnel.

CHARGING CABLE DAMAGE

Do not operate the charger if the charging cable is damaged or if here are exposed wires in the charging cord assembly. Shut off power at the electrical disconnect or at the breaker. Then immediately contact TellusPower service. If there are any questions, please contact customer service.

SAFETY INSTRUCTIONS

Read the entire installation instructions before designing the installation and prior to installation.
This equipment should be installed by a journeyman level electrician. Local building codes need to be complied with. In most jurisdictions the installation of this equipment requires plan check, building and electrical permits. Verify with the local Authority Having Jurisdiction prior to starting construction.
The charging station relies on the grounding system for safety. All grounding instructions should be strictly adhered to as prescribed in this manual and any applicable electrical safety requirements, all local electrical safety codes, and NEC.

CRITICAL SAFETY READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

HIGH VOLTAGE EQUIPMENT:

This charging system contains both AC and DC high voltage circuitry and devices and should only be installed by a qualified electrician trained to work on high voltage, high current AC and DC systems.

ADDITIONAL CAUTIONARY NOTES

WARNING

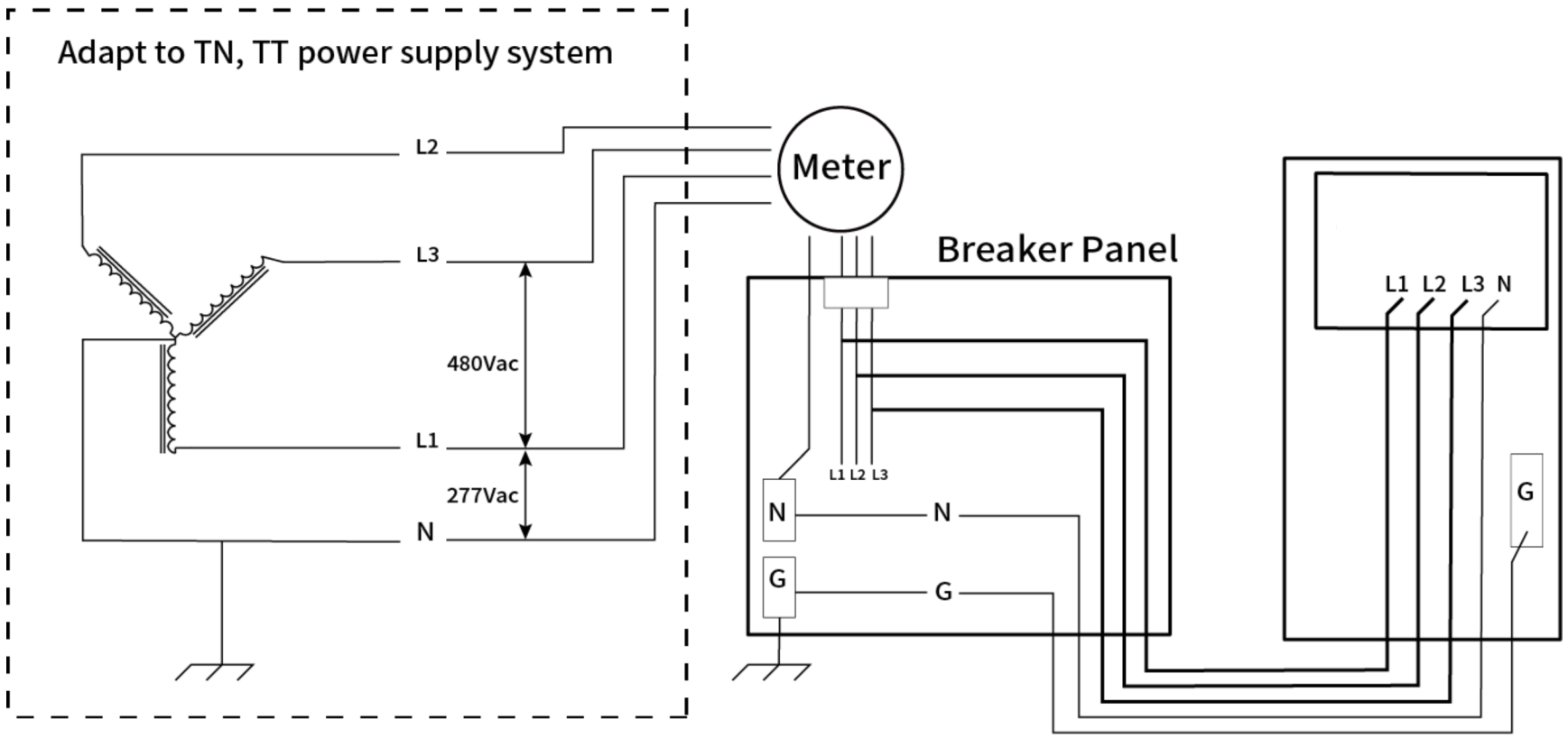
Do not have power on while any of the maintenance doors are open unless proper personnel protection equipment is worn.
Only trained personnel should be working in this equipment while the doors are open, and the unit is powered on.

WARNING

There are high voltage and high-capacity energy storage components on this system. There are components and circuits that remain charged for some time (1 to 2 minutes) with high voltage power, even after main power is disconnected. Always test with a voltmeter before any maintenance or service is performed.

Only TellusPower authorized personnel are allowed to perform product repairs.

ADAPTED GRID SYSTEM



INSTALLATION OVERVIEW

Electrical Input Requirements	Input voltage: 480 VAC (3 Phase + Neutral + Earth), 60Hz
Location	This charging stations has 4 doors i.e. Front, Rear, Left and Right. Clear 30" distance on the front and rear sides and 24" on left and right side of a charger to be maintained for air circulation for cooling and opening panel for maintenance.
	Flat Concrete Base with vertical gradient not more than 5% will be provided and a provision for electrical service wires to exit the concrete pad in the location as defined in this document.
Mounting Pad	Mounting pad shall be of concrete cement with approximate dimensions Length 37.5", Width 30.5", Height 25", to accommodate the weight and dimensions of the base. Use expansion bolts to secure the charger to the concrete mounting pad.
	For ADA requirements, the concrete mounting pad shall not exceed 1.38 inches above the plane of the parking lot.
	For relocation / lifting – Forklift can be used, provision has been made for this.

INSTALLATION OVERVIEW

Barricade (Bollards)	Suitable bollards should be provisioned to restrict approach of EV to the charger . EV shall be at in accordance with local code.
Cables	Input Cables must be Copper (3P+N). Flexible copper is preferred. Please see the table below in next section for the cable gauge.
	Depending on the situation and cable type, the cables must be embedded in the ground with proper cable duct.
Grounding	Reliable protective grounding must be provided. It is recommended to have separate dedicated ground exclusively for the charger considering the safety aspects. The ground resistance should be less than or equal to 4Ω. Copper cable of in accordance with NEC shall be used to connect charger housing to externa ground.
Breaker	Breaker (3P+N) with suitable current capacity depending up on the charger rating to be provided. This shall be in accordance with NEC, typically 1.25 X Full Load Amperage.
Miscellaneous	Copper lugs (Flat type) for input cable and earth cable should be provided based on size of cable.

INSTALLATION OVERVIEW

Additional notes	Do not let the flammable, explosive or flammable materials, chemicals, flammable vapors, and other dangerous goods close to charging station.
	In the areas of floods, heavy rains, storms, snow, or similar harsh weather conditions, TellusPower recommends a canopy for the charger for protection. The charger is IP54.
	Confirm that your installation site has a load capacity sufficient to support this equipment.
	Charge cable length depending on options will be between 13 ft & 16 ft.

ADA CONSIDERATION

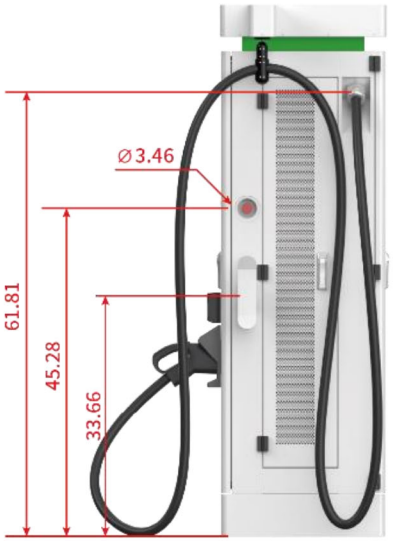
This equipment has been designed to meet ADA requirements when installed as prescribed in this manual and in accordance to the STANDARDS FOR ACCESSIBLE DESIGN for Americans with Disabilities document, 2010 ADA Standards for Accessible Design:
http://www.ada.gov/2010ADAstandards_index.htm
Parking space, allowances for wheelchair movement, charger, bollards, and parking stops are defined in several publicly available EV charger installation recommended practices documents incorporating the ADA requirements. http://www.ada.gov *For information about the ADA, including the revised 2010 ADA regulations, please visit the Department' s website www.ADA.gov; or, for answers to specific questions, call the toll-free ADA Information Line at 800- 514-0301 (Voice) or 800-514-0383 (TTY).

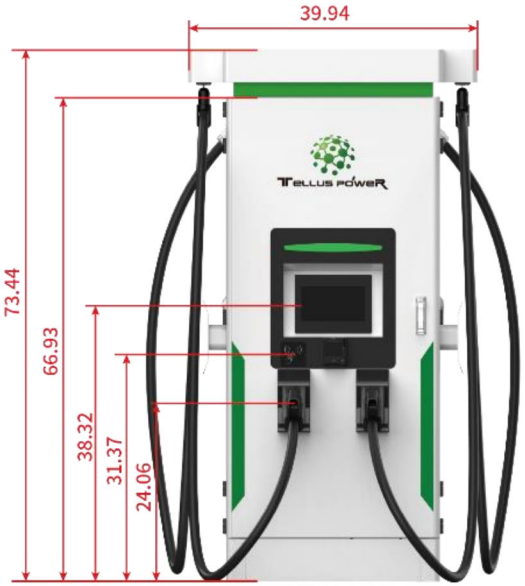
BOX CONTENTS

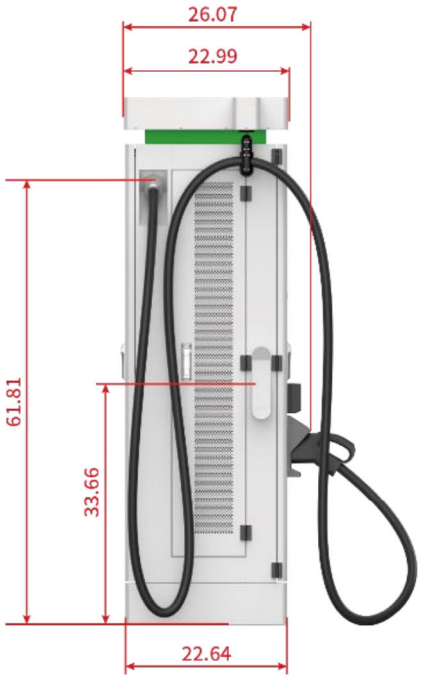
Item	Quafitity
Charger	1
Bolt M14 *100	6
Charging Card	3
Key	2
Factory Test Report	1
Matching socket or hex wrench (Match according to the molded case circuit breaker model)	1
Forklift damper	2
Screws M5 *8	8
Certificate	1

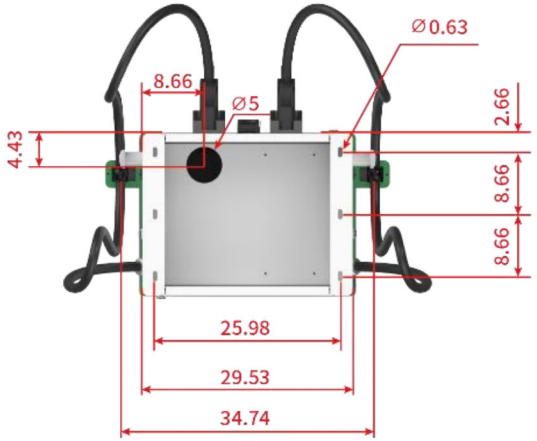
Bolt M14 *100	Matching socket or hex wrench
	
Charging Card	**Forklift damper**
	
Key	**Screws**
	
Factory Test Report	**Certificate**
	

OUTLINE OF DRAWING



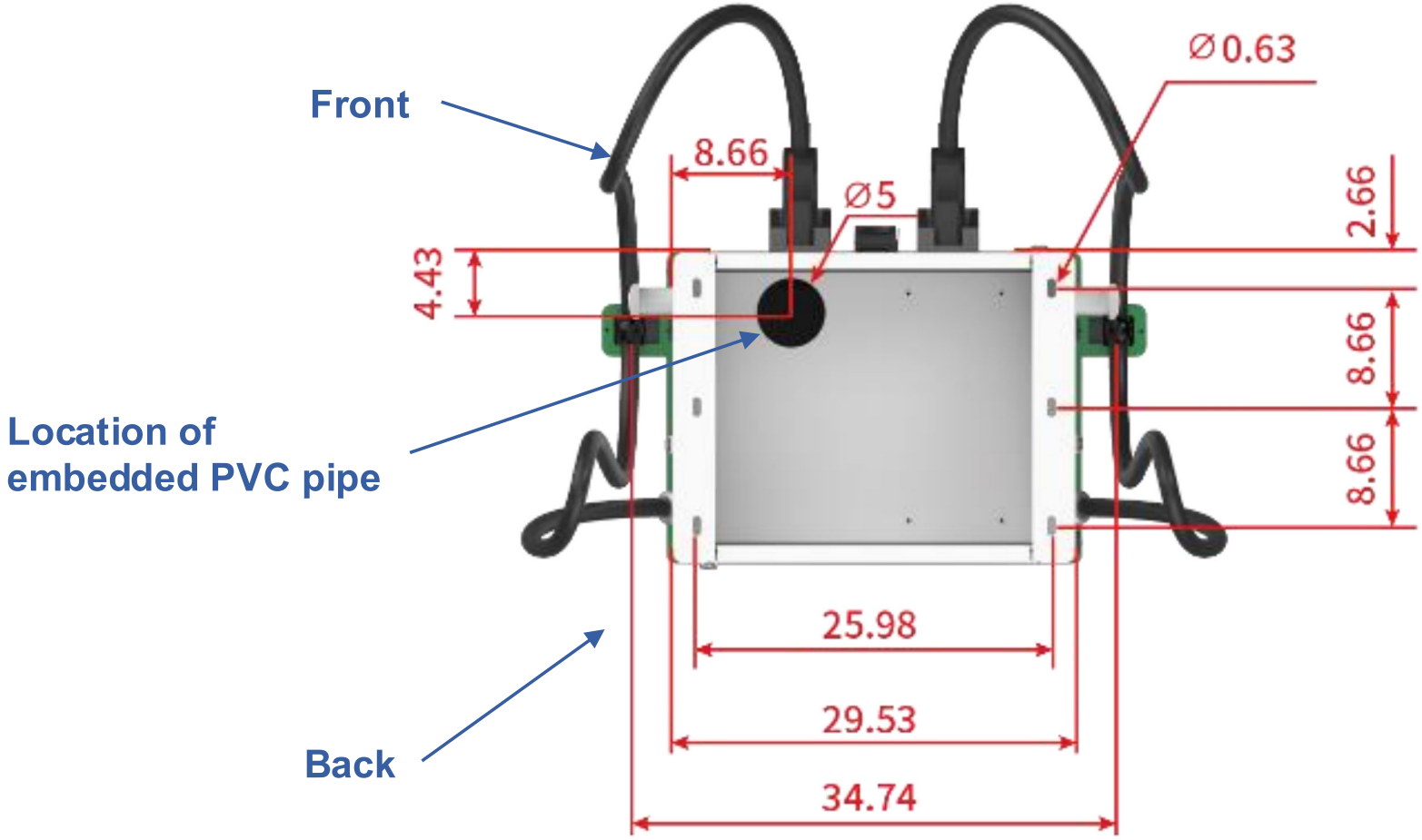




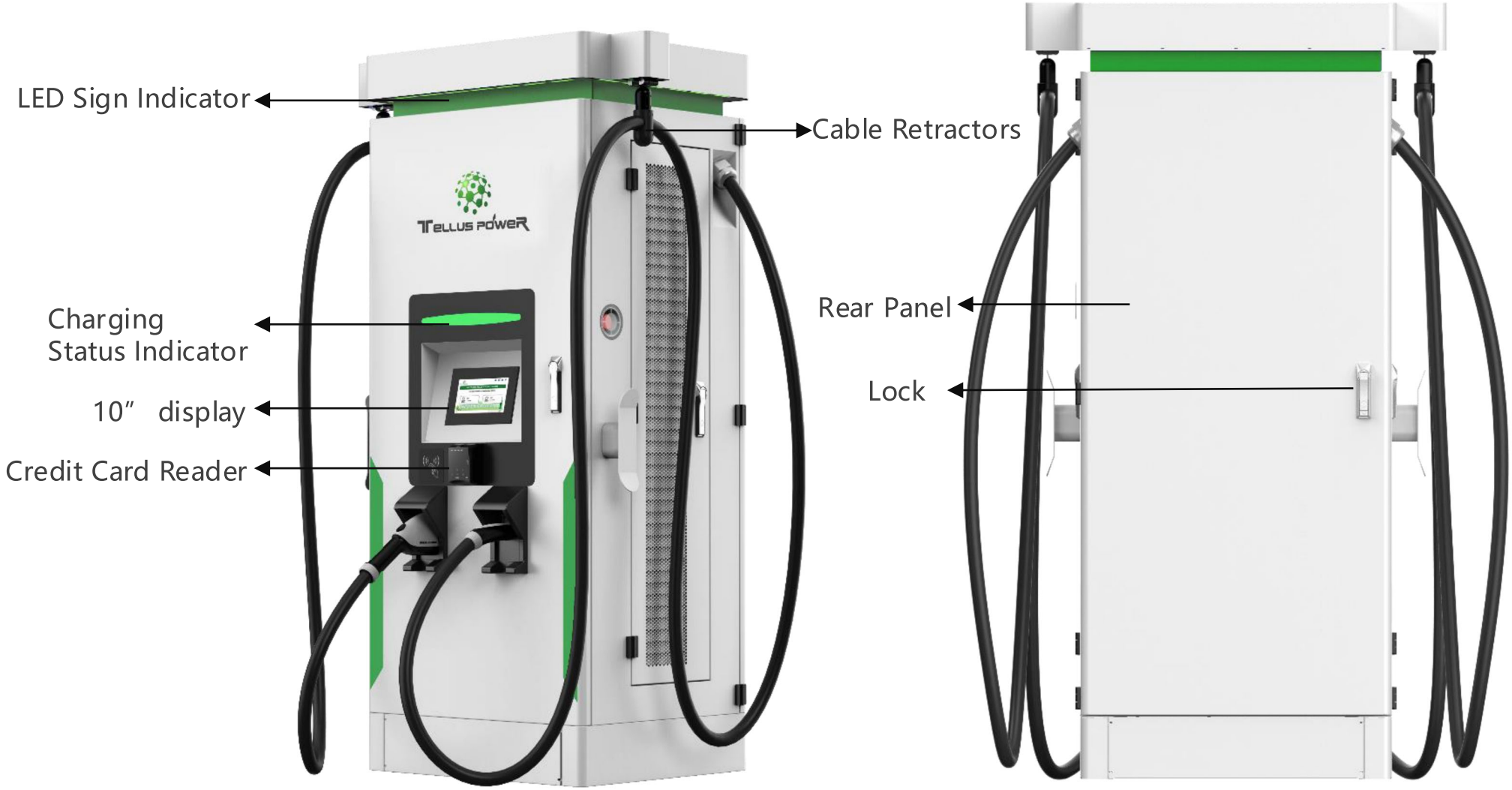


OUTLINE OF DRAWING

Before making the concrete pad, determine the position of the pre-embedded PVC pipe according to the position shown in the figure to facilitate later wiring.

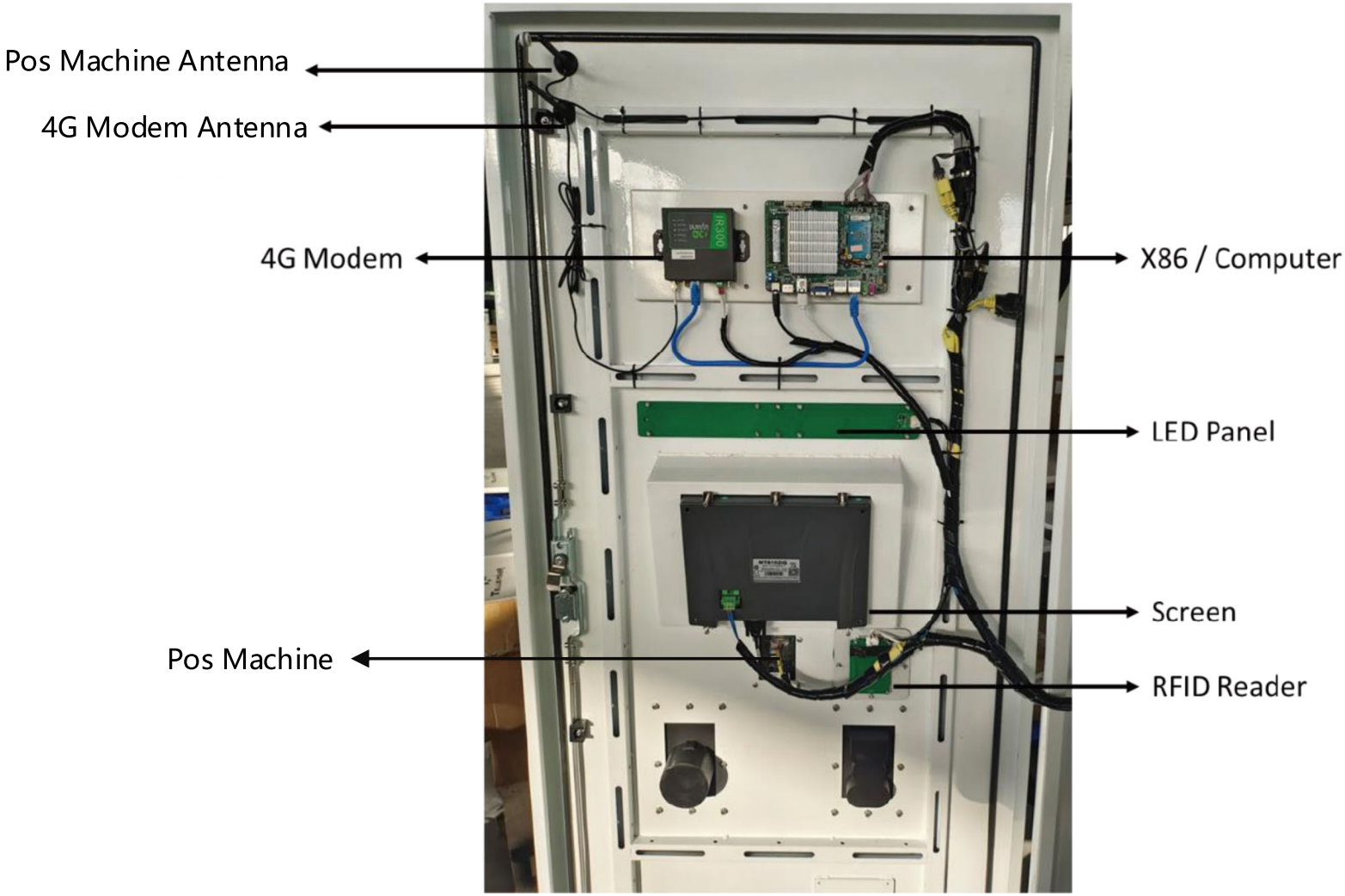


STATION ANATOMY

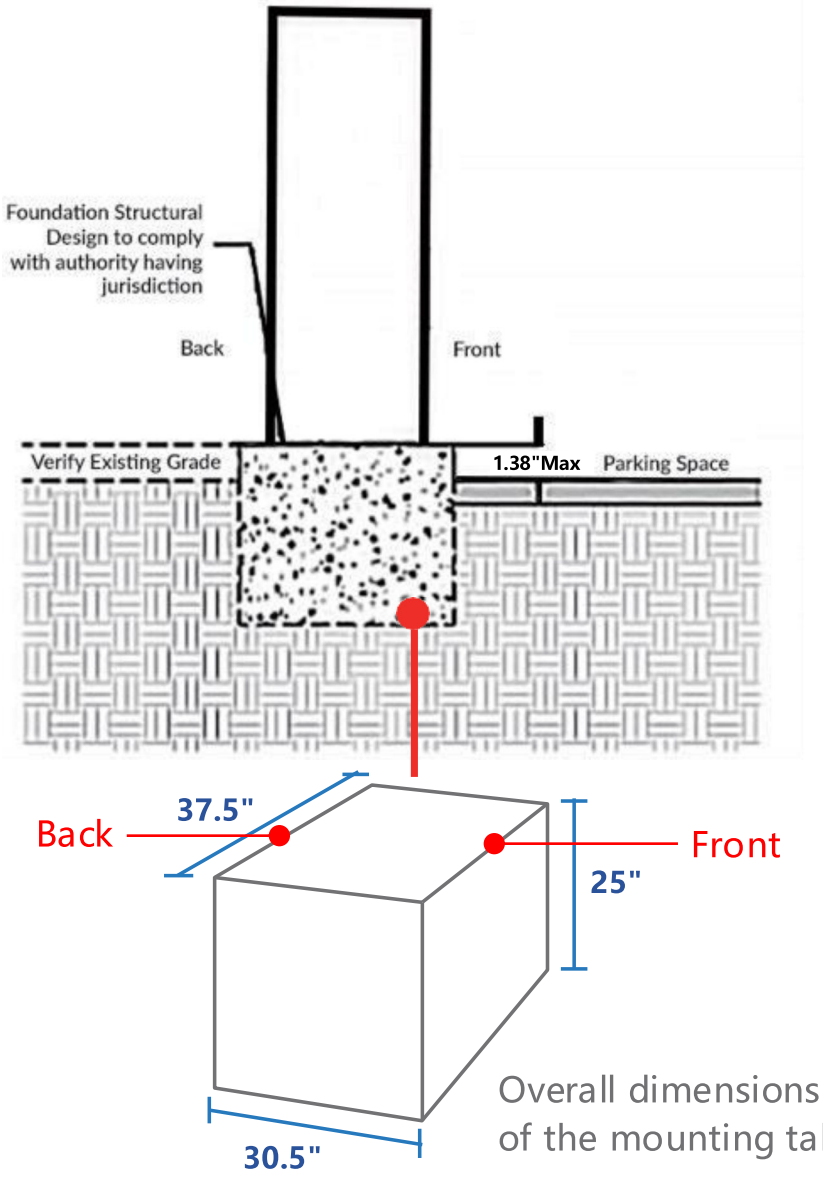


STATION ANATOMY

STATION ANATOMY



MECHANICAL INSTALLATION



Overall dimensions of the mounting table

CONCRETE PAD

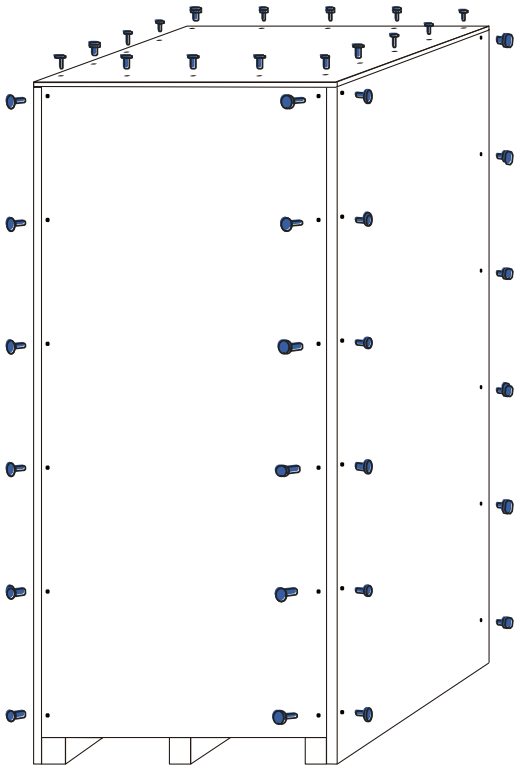
Concrete pad using 3,000 to 4,000 psi concrete should be used. Electrical for AC power should be position such that it exits the concrete pad at the Main AC Power Line Opening.

Important things to note:

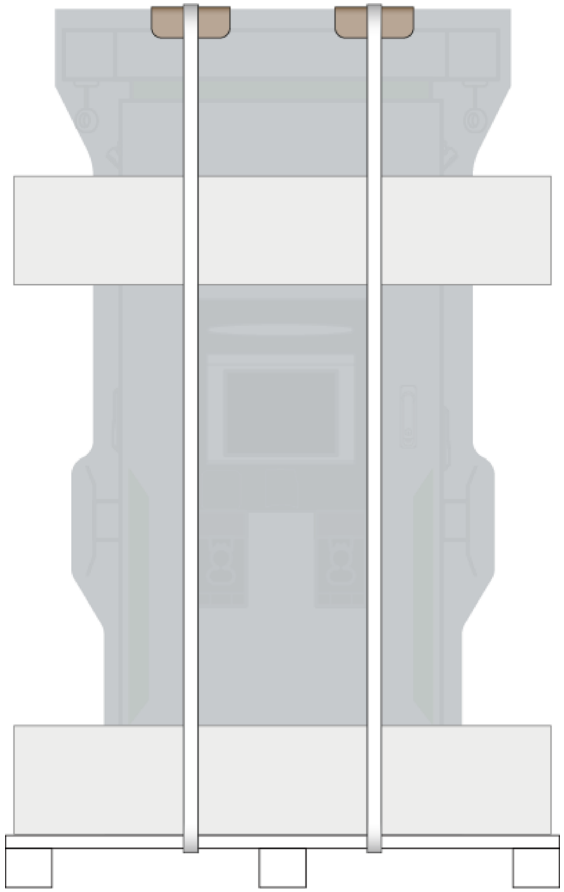
- When making the installation platform, a PVC pipe with a diameter of 100mm is pre-buried, and steel wires are reserved in the PVC pipe for the convenience of wiring.
- The reserved position of the PVC pipe corresponds to the position of the cable inlet at the bottom of the charging pile.
- The dimensions of the concrete foundation will need to be determined according to the local jurisdiction. The reference foundation is 23.62" deep below ground, Foundation fabrication uses steel bars in accordance with relevant standards. Recommended 5/8" threaded rebar . The concrete platform should be 1.38" above ground, any more than 1.38" will cause the charger to control above the ADA compliance maximum and may cause the inspection to fail and the foundation may need to be lowered to Meets ADA guidelines.

STEP 1 UNPACK

01. Remove the screws around and at the top of the packing box.

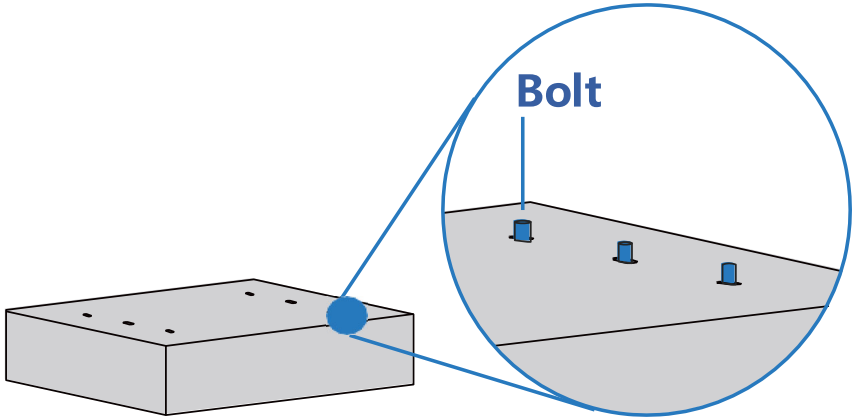


02. Untie the straps that fixes the charging station and remove the vacuum bag and plastic film.

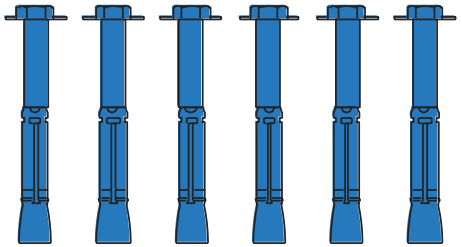


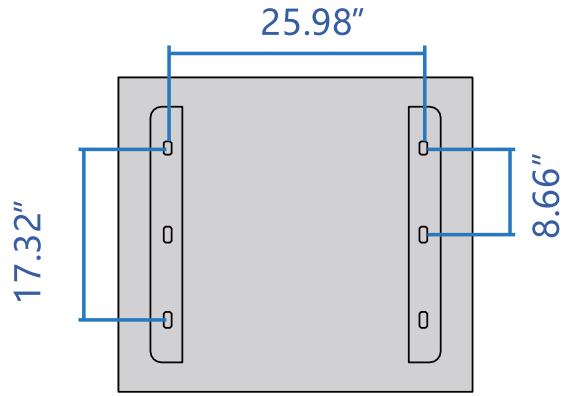
STEP 2 START INSTALLATION

03. Drill holes on the mounting platform according to the bolt hole size at the bottom of the charging station, and pre-install the expansion bolts at the grounding holes.

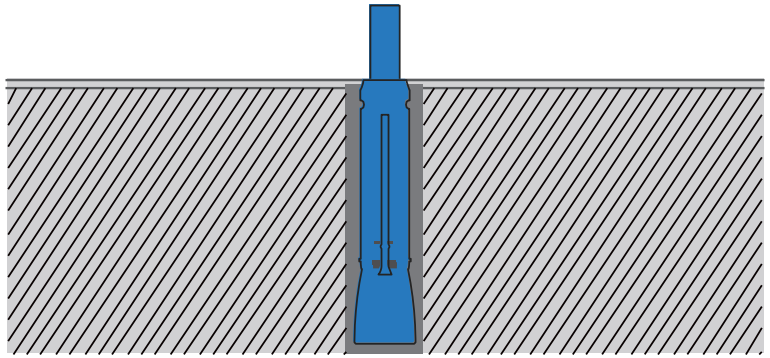


Bolt M14*100 × 6





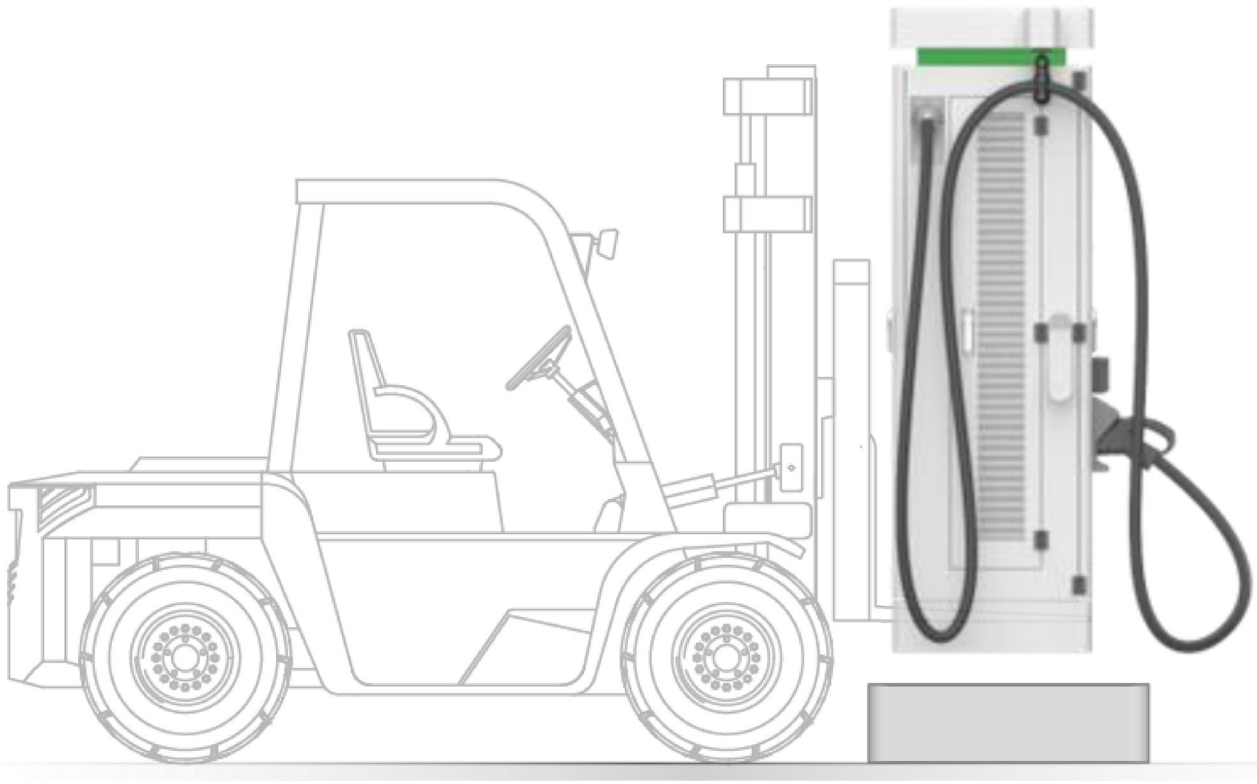
1. The ground holes are 0.71″ in diameter and 4.33″ — 4.72″ in depth.



2. Remove the nut and gasket, and put the expansion bolt body into the hole (as shown in the figure).

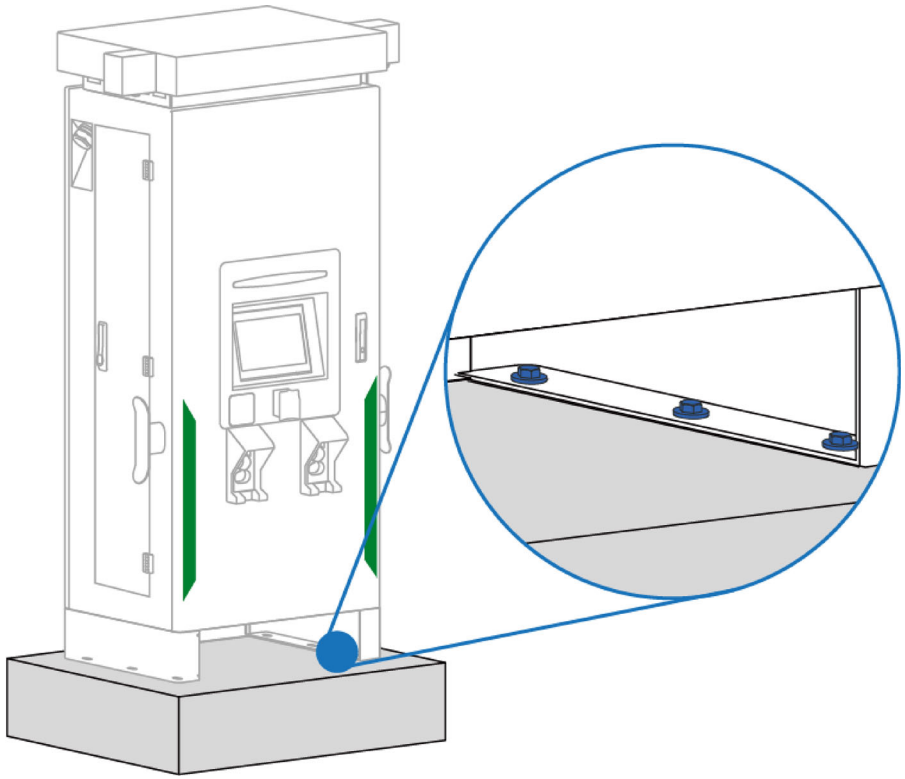
STEP 2 START INSTALLATION

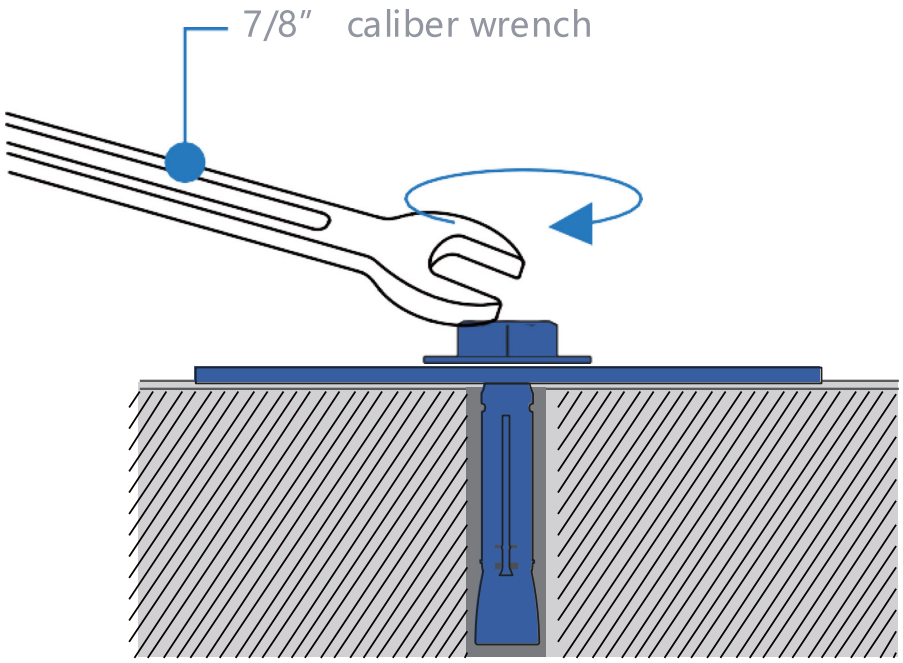
04. Use a forklift to move the charging station to the installation site.



STEP 2 START INSTALLATION

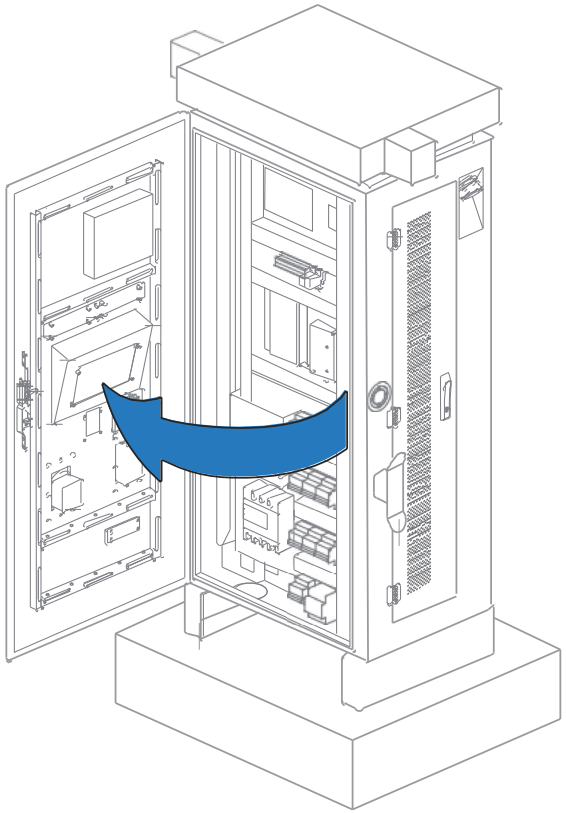
05. Tighten the expansion bolts after placing the charging station at the installation site.





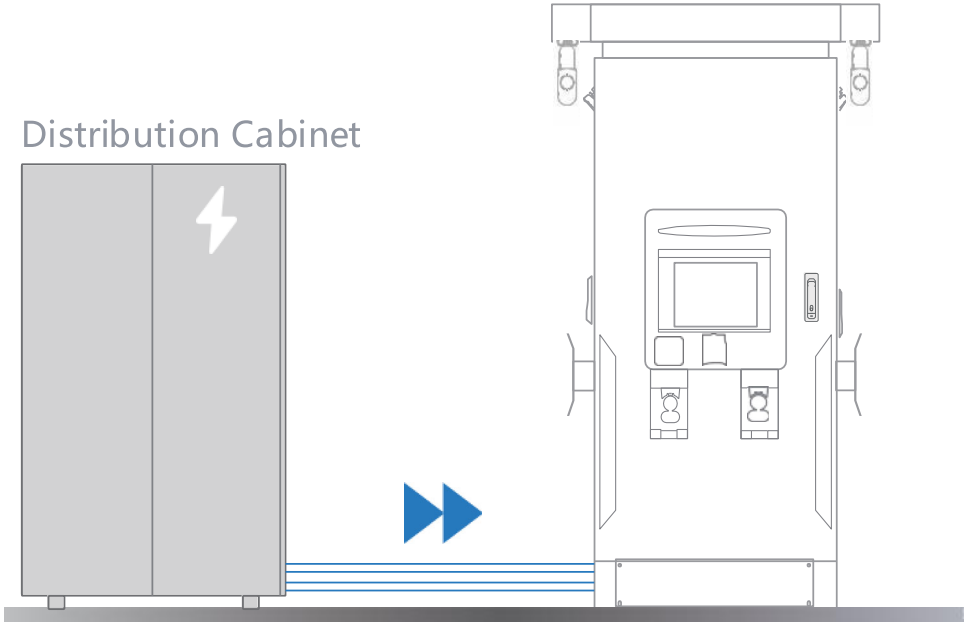
STEP 3 WIRING

06. Open the front door of charging station.



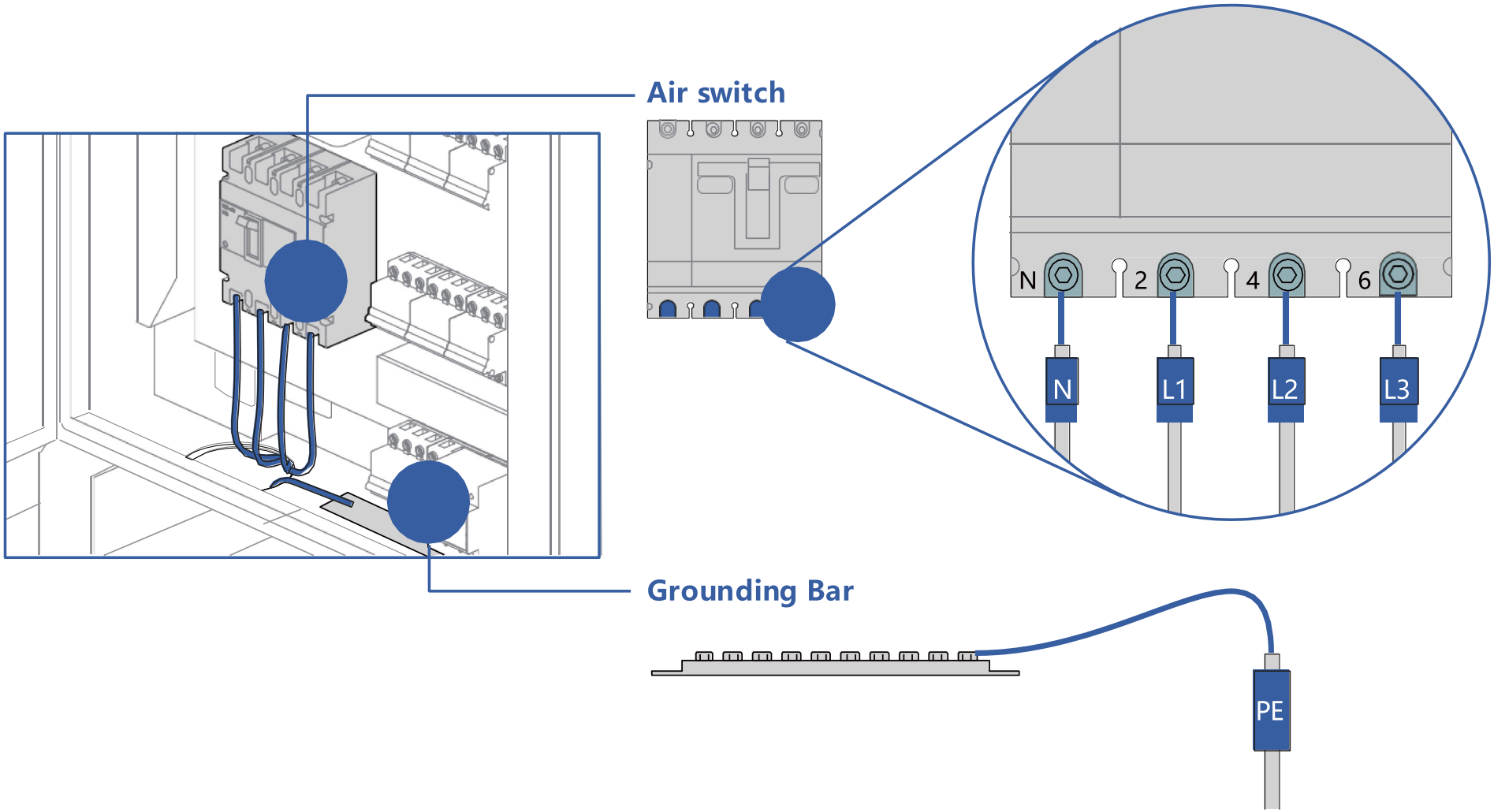
07. Start connecting wires.

The incoming line is connected from the power distribution cabinet to the molded case circuit breaker and grounding bar of the charging station.



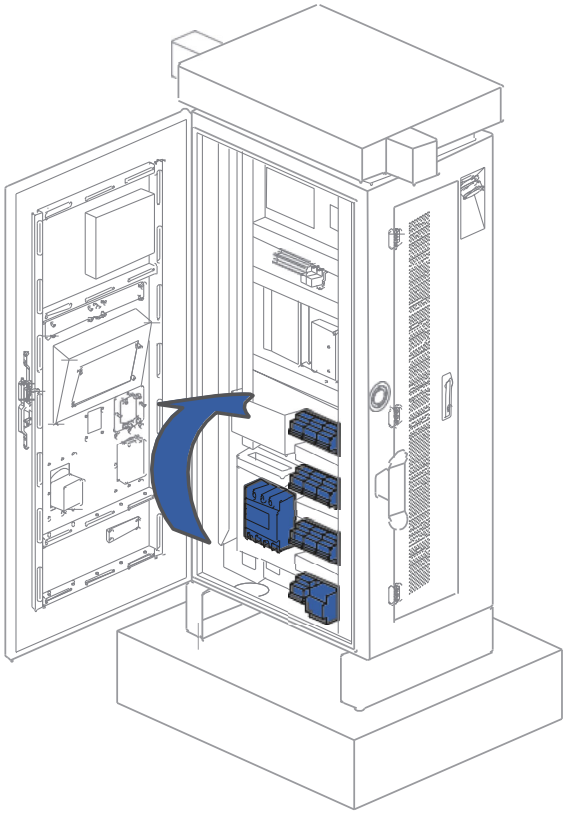
STEP 3 WIRING

08. The inlet wires are connected to the MCCB and the grounding bar through the opening at the bottom of the charging station.

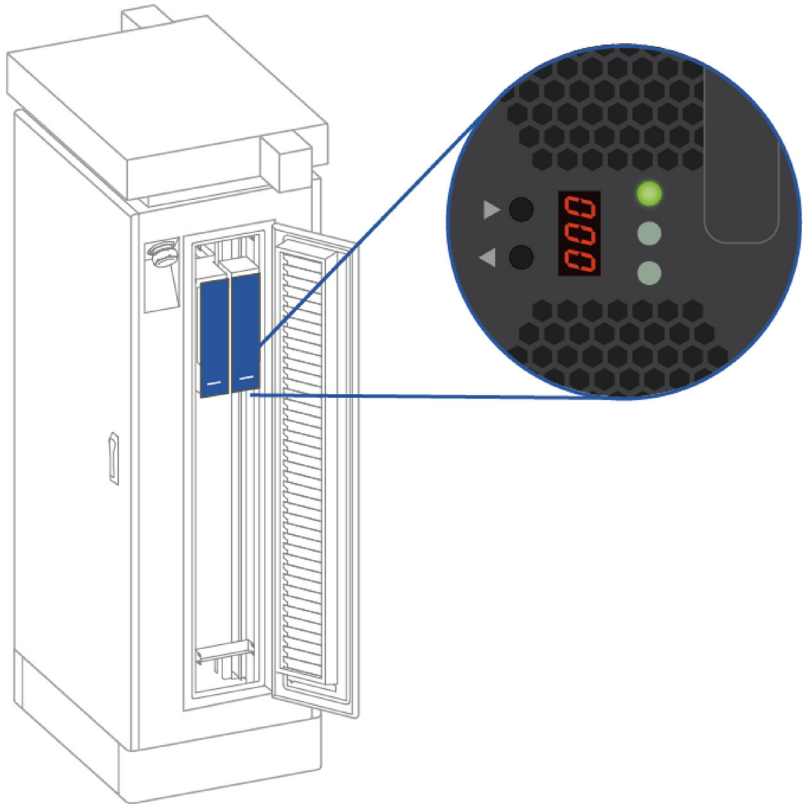


STEP 4 PREPARATIONS BEFORE STARTING

09.Turn on all switches in the charging station.



10. Open the door on the left side of the charging station and check if the power module lights up green.

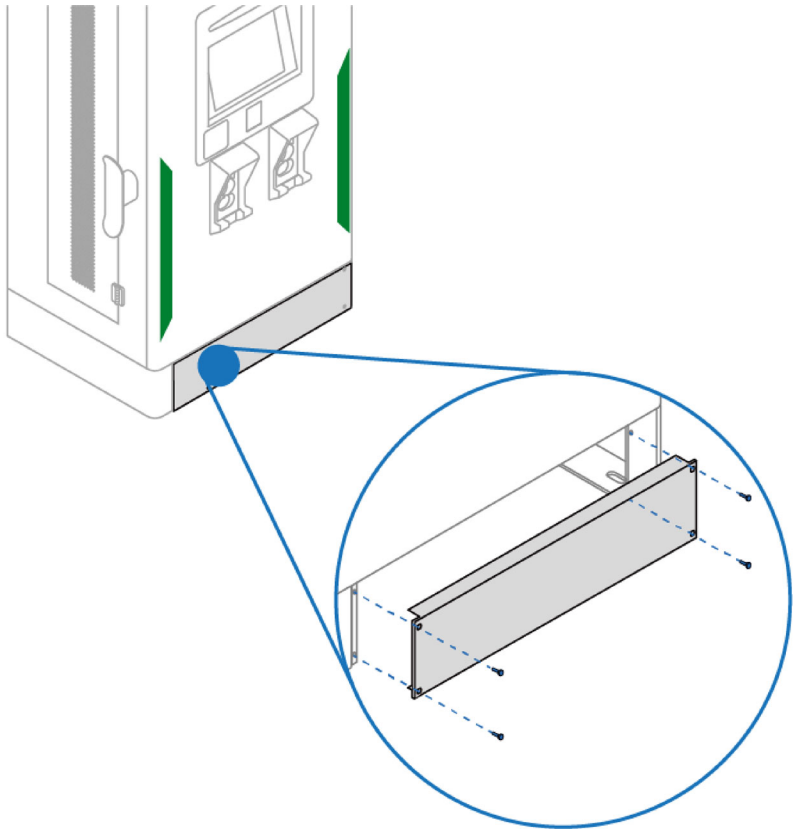


STEP 4 PREPARATIONS BEFORE STARTING

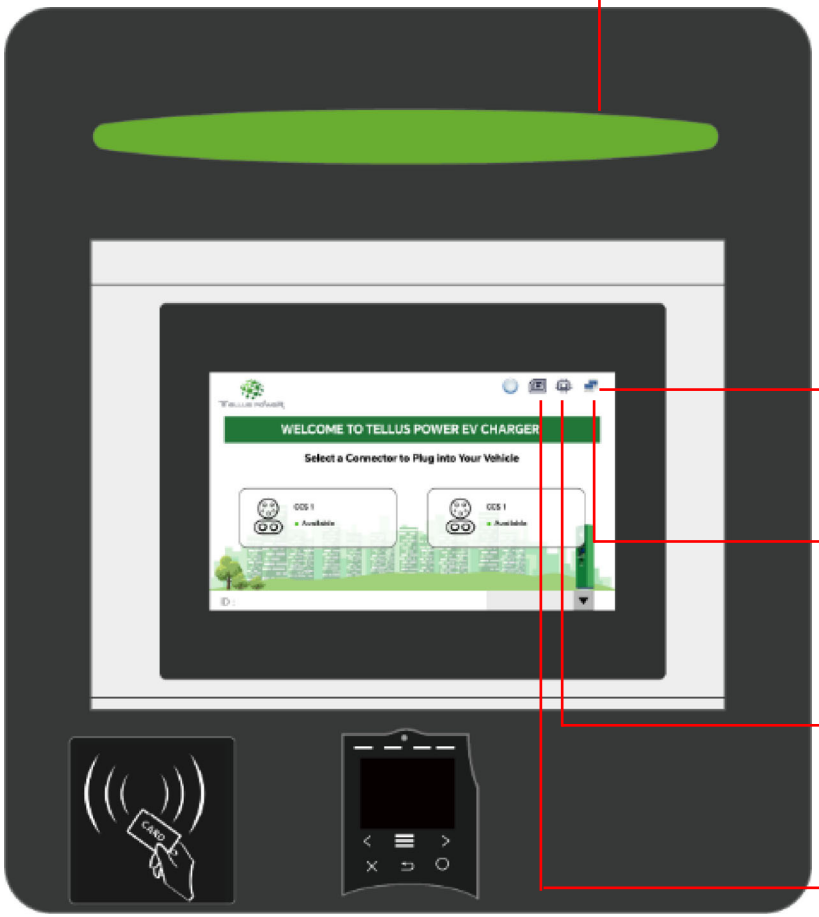
11.Wait for the front panel indicator to change from red to green.

12.Install the front and rear Forklift dampers.

Screws M5 *8



OPERATING INSTRUCTIONS

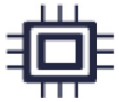


LED Indicator:

RED / Orange	Fault
Green	Charging
White	Available

This icon indicates the charger is not connected to a server network or loss of internet connectivity. If nonetwork is connected. the station works as a stand-alone device with TellusPower RFID cards.

This icon indicates the charger is connected to a server network; it can be authorized with registered RFID cards or mobile app.

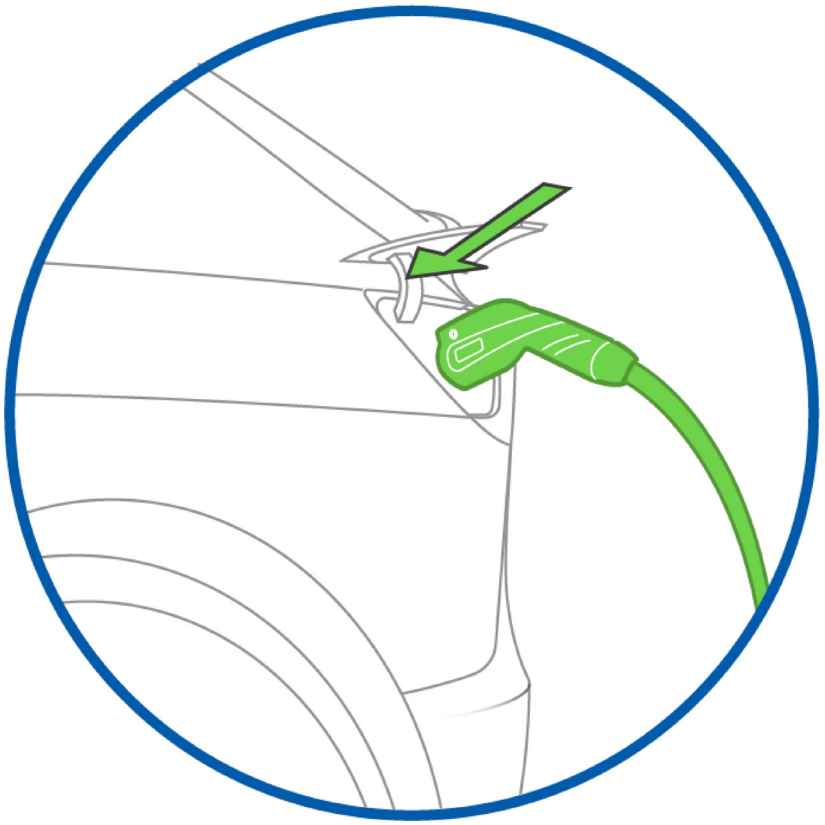


The stable icon indicates working condition of the charger. If the icon flashes or not visible on the screen . the controller is inactive.

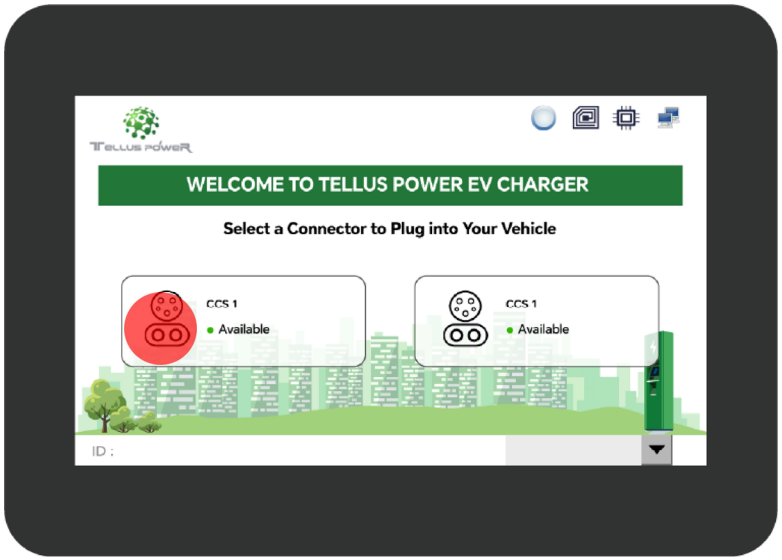
RFID card reader is active. If the icon is not visible on the screen, the RFID reader is inactive.

HOW TO START A CHARGING SESSION

01. Please select the connector compatible to your EV. Plugin the connector.

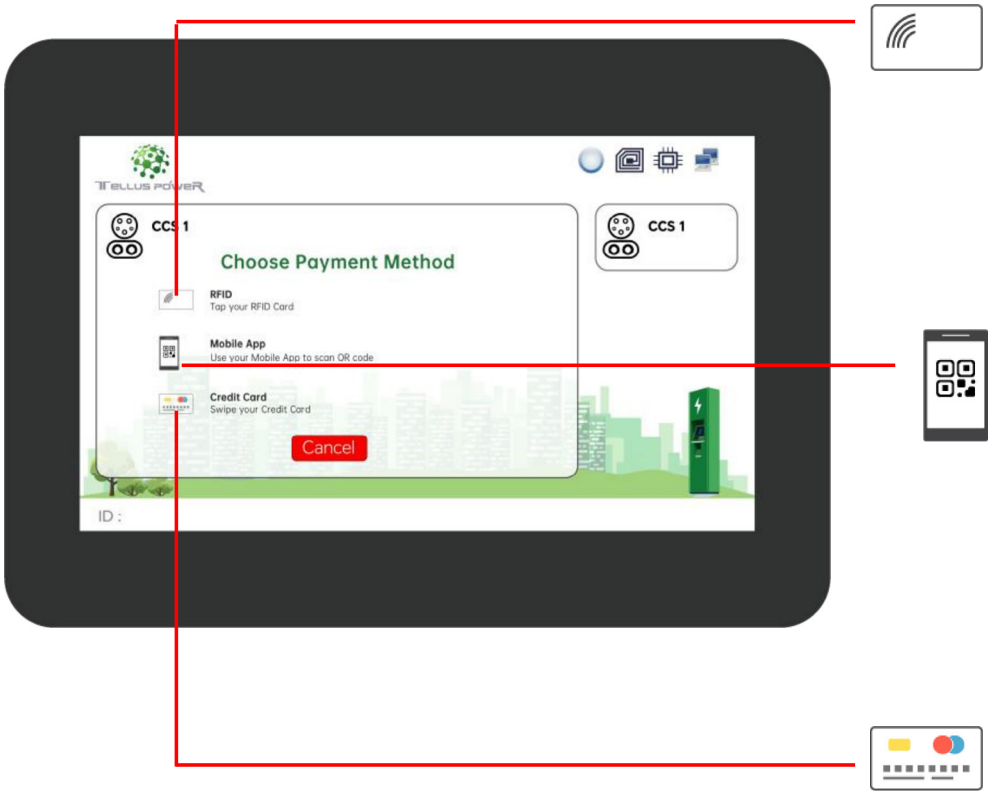


02. After the charging cable is plugged in, it will display "connected", click "connected".



HOW TO START A CHARGING SESSION

03. select Authorization/Payment Method



During the charging process, a real-time data output of the charging process on the screen appears. At any point of time, charging session can be stopped using Stop button on the screen or Emergency Stop button.

RFID CARD

1. Charger display will provide options to select Authorization/Payment Method.
2. Swipe the RFID Card.
3. Charging session will begin within 60 seconds.
4. To stop the charging - Swipe the same RFID card again or use STOP button on screen.

QR CODE /MOBILE APP

1. Charger display will provide options to select Authorization/Payment Method.
2. Scan the OR code or start the charging from Mobile App.
3. Charging session will begin within 60 seconds
4. To stop the charging - Stop from the Mobile App or use STOP button on screen

CREDIT CARD

1. Charger display will provide options to select Authorization/Payment Method.
2. Authorize your credit card. Make sure you have enough balance on the card to charge
3. Charging session will begin within 60 seconds
4. Charging will automatically stop after the 100% charge or use STOP button on screen

MAINTENANCE AND SERVICE

DANGER

READ AND FOLLOW THE "SAFETY CONCERNS" AT THE BEGINNING OF THIS MANUAL BEFORE USING THIS DEVICE.

EV Charging Stations require regular maintenance beyond installation to ensure the quality of the vehicle's charge, and the continued value of your electric vehicle. Whether you're installing a personal EV charger, or a public one for use, eventually you will require repair or maintenance services to keep your system working without flaws.

MAINTENANCE PRECAUTIONS

Each of the capacitors in this device have a high voltage for a time after shutting off the input power supply. Allow 1 minute after powering down before servicing internal components.

MAINTENANCE ITEMS

Perform periodic checks every 3 to 6 months based on the site conditions and the usage of the charging station.

1. Check the input voltage and ensure it is within the acceptable limits.
2. Check the Ground / Earth resistance and ensure it is within the acceptable limits
3. Clean the Air Filter periodically
4. Make sure that Power Module lights are blinks green
5. Ensure the charging cables are not worn out and gun pins are clean.
6. Make sure all the air-cooling fans are working normally.

MAINTENANCE AND SERVICE

VISUAL CHECK ITEMS

1. **Check for abnormal sound from running fans and power units.** If there is abnormal sound, Please don't make assumptions, call us! for further assistance.
2. **Check for abnormal odor, changes of inner materials, corrosion, anomaly in appearance, etc.in this device.** If there are any anomalies, Please don't make assumptions, call us! for further assistance.
3. **Check for dust and dirt in this device regularly.** The air filters on the doors can be removed and cleaned using a vacuum cleaner or air blower. The cabinet can be cleaned using a vacuum cleaner. The dust on the components can be cleaned using a soft cloth. Please pay extra attention while using the vacuum cleaner, it should not apply pressure on the control boards or any components.

REPLACEMENT OF FIXED-LIFE COMPONENTS

To prevent the device from failure due to worn out components, it is necessary to replace the components before they reach the end of their lifespan. Use the following replacement intervals as a guideline for the estimate of the total running time. Please don't make assumptions, call us! for further assistance.
when you replace the parts.

- Intake and exhaust air filters (if present): Approximately three (3) years. The period depends upon the site conditions.
- Please keep in mind that the replacement interval of each part can vary depending on, for example, the usage environment of the device.

TROUBLESHOOTING

ERROR CODES

If an error occurs, check the nature of the error by referring to following "Error Code List" and take appropriate actions according to instructions by the manufacturer.

ERROR	DESCRIPTION	POSSIBLE SOLUTION
ERROR FLAG 0	Lightning protection device failure	Check the SPD and GFCI circuit.
ERROR FLAG 1	Insulation detection abnormal	The insulation check on the EV has failed. Please try to charge different EV.
ERROR FLAG 2	Abnormal communication between Insulation Monitor and Main Control Board (CM)	Please check the connection between the IM and CM boards. Check the LED lights on the CM and IM.
ERROR FLAG 3	Abnormal communication between TR board and CM board	Please check the connection between the tr and cmboards. Check the LED lights on the CM and TR.
ERROR FLAG 4	Electronic lock failure	Possible failure of the gun to lock on the EV or the 24v supply voltage.
ERROR FLAG 5	Internal use	Reserved.
ERROR FLAG 6	Abnormal communication between DC meter and Main Control Board (CM)	Please check the connection between the DC and CM boards. Check the LED lights on the CM and communication lines of DC meter.

TROUBLESHOOTING

FAULT TYPE	SOLUTION
IP address communication failure or Server Communication Failure	Please check the parameter settings interface IP address information, such as the corresponding IP address is not correct, please re-enter the address, restart the charging station.
AC input over voltage / under voltage	Please check the AC input side of the voltage is too high or too low, excluding the input exception if there is a fault, and then check the parameters set the interface set the threshold is correct.
DC output over voltage / over current	Please check whether the output voltage and current are within the range of parameter settings. If not, please check whether the output voltage, current is too high, or whether the parameter setting is reasonable.
Card reader failure	The card reader is incorrectly wired, or the card reader is disabled.
Insulation fault	Please check whether the DC bus insulation is normal.
Monitoring board communication failure	Check whether the monitoring board communication line is correct.
Charging gun connection failure	Charging gun connection disconnected, please check whether the charging gun is connected properly.

TROUBLESHOOTING

FAULT TYPE	SOLUTION
The emergency stop button is pressed	Check whether the emergency stop button is pressed, if it is, inspect the charger and if everything is normal, release the emergency button and restore the main breaker.
Charging Session shutdown is not successful	MCU board and power module communication failure. Please press emergency stop button to stop the charging. Check the MCU board and power module CAN communication bus.

CUSTOMER RESPONSIBILITIES

1. To operate the charge station with the required protective devices such as MCBs and switches and proper cables installed.
2. The operator/owner/customer is cautioned that any changes or modifications not approved by TellusPower shall void TellusPower warranty policy
3. To write an emergency plan that instructs people what to do in case of emergency.
4. To locate and prepare the site as per the instructions laid out in this document.
5. To make sure that there is sufficient space around the charger to carry out any regular maintenance work.
6. To appoint a trained person(s) responsible for the safe maintenance/service of the charge station.
7. Neither TellusPower nor any of its affiliates shall be liable to the operator/owner/customer of this product or third parties for damages, losses, costs, or expenses incurred by as a result of: an accident, misuse or abuse of this product or unauthorized modifications, repairs or alterations to this product, or failure to strictly comply TellusPower operating and maintenance instructions.

EXCLUSIONS FROM LIMITED WARRANTY

IMPORTANT: The Limited Warranty and on your Product shall not apply to defects, or service repairs, resulting from any of the following:

- Damages due to normal wear and tear to charging cords, connectors, LCD/LED display, Touch Screen, or any product alteration or modification, misuse, abuse, accident, vandalism, acts of nature, power surges, or use of software, parts, or supplies not supplied by TellusPower, and causes other than manufacturing defects not covered by the warranty.
- Force Majeure – any occurrence or extraordinary event or circumstance beyond the control of TellusPower that is an act of God or whether that occurrence is caused by war, riot, storm, (such as hurricane, flooding, earthquake, volcanic eruption, etc.), or other natural forces, including high input voltage from generators or lightning strikes or acts of nature or other causes.
- Any Alteration or Modification of the Product in any way not approved in writing by TellusPower.
- Abuse, damage or otherwise being subjected to problems caused by negligence (including but not limited to physical damage from being struck by a vehicle) or misapplication, or misuse of the Products by customers or end users.
- Any damage to the EV charger cord, unless such damage is caused by a manufacturing defect in the cord or connector assembly.

EXCLUSIONS FROM LIMITED WARRANTY

- Improper site preparation or maintenance. That has been improperly installed, operated, handled, or used, including use underconditions for which the product was not designed, use in an unsuitable environment, or use in a manner contrary to the TellusPower Installation and Operations Manual or applicable laws or regulations.
- Damage because of accidents, extreme power surge, extreme electromagnetic field.
- Use of the Product with software, interfacing, parts or supplies not supplied by TellusPower.
- TellusPower disclaims any liability for damage to product, property, or personal injury resulting in whole or in part, from improper installation, maintenance or use that is not in accordance with TellusPower installation and maintenance procedures.
- Maintenance or use that is not in accordance with TellusPower installation and maintenance procedures.
- That has been subjected to incidental or consequential damage caused by defects of other components of the electrical system.