# INSTALLATION GUIDE

## Models: TP2W-80-220-J1

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

## 1. 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.

## 2. 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.

## 3. CRITICAL SAFETY

### 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 damageto 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.

| | | |
|---|---|---|
|  | **CAUTION!** | Risk of electric shock. Do not remove cover or attempt to open the enclosure. No user serviceable parts inside. Refer servicing to qualified service personnel. |
|  | **WARNING!** | Gronud machine takes a suitable ground before operation. |
|  | **WARNING!** | This device is intended only for charging vehicles not requiring ventilation during charging. |

## 3. CRITICAL SAFETY

### 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 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.

## 3. CRITICAL SAFETY

### HIGH VOLTAGE EQUIPMENT:

This charging system should only be installed by a qualified electrician trained to work with high voltage, high current 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 authorized personnel are allowed to perform product repairs.

## 4. PRODUCT FEATURES

### Fast

- Max 19.2kW.Output amperage
- adjustable from 0A to 80A.

### Simple

- Easy installation and maintenance with integrated holster
- Remote firmware update and troubleshooting.

### Reliable

- Considerate safety design in every situation.
- Reliable Charging in all scenes.
- IP54 protection from water and dust (Only for cable version)

### Smart

- Dynamic load balancing
- Smart connectivity: Wifi, BLE, Ethenet RJ45,CAN,485... OCPP V1.6/WSS

### Easy to se

- 5# LCD
- RFID control APP control
- Local remote key control
- Plug and charge

### Safety

- IP54 rated,Electric Shock Avoidance
  Overcurrent, overvoltage, undervoltage , Upstream PE monitor , Output PE continuity check, Cyber security

## 5. TECHNICAL PARAMETERS

| SN | Items | Technical parameters | 19.2kW |
|---|---|---|---|
| 1 | Type | | TP-EVVA-120/240 |
| 2 | Input/Output AC Voltage | | 208VAC - 240VAC, 60 / 50 Hz<br>80A continuous load with 100A branch circuit |
| 3 | Rated current | | 80A |
| 4 | Rated voltage | | 120/240VAC |
| 5 | Rated AC frequency | 50/60±1Hz | ✓ |
| 6 | Output power | | 19.2kW |
| 7 | EV Charger cable | 5m | ✓ |
| 8 | Mounting | Stand pedestal | Optional |
| 9 | | Wall mounting | ✓ |
| 10 | Connector holster | | ✓ |
| 11 | Mounting environment | Place with no strenuously vibratory, flammables,explosives; No water dipping risk； good ventilation; | ✓ |
| 12 | Degree of protection （IP Class） | IP54 | ✓ |
| 13 | Atmospheric pressure | 80kPa ~ 110kPa | ✓ |
| 14 | Working humidity | 5% ~95% without coagulate frost, without knots ice | ✓ |
| 15 | Operating temperature | -30℃-50℃ | ✓ |

## 5. TECHNICAL PARAMETERS

| SN | Items | Technical parameters | 7kW single phase |
|---|---|---|---|
| 16 | RFID reader | Active multi-standard | ✓ |
| 17 | HMI | RGB LED | ✓ |
| 18 | | 5" Touch Screen | ✓ |
| 19 | Network connectivity | LAN:IEEE802.3/802.3u RJ45 | ✓ |
| 20 | | Wi-Fi IEEE802.11 | Optional |
| 21 | | Mobile network 4G | Optional |
| 22 | | BLE V5.0 | Optional |
| 23 | | OCPP V1.6/WSS | ✓ |
| 24 | Data Inputs/Outputs | RJ45 (CAT-5 Ethernet cable connects Gateway station to Non-Gateway station) | ✓ |
| 25 | Power report/store interval | 15-minute, aligned to hour | ✓ |
| 26 | Power report/store interval | 15-minute, aligned to hour | ✓ |
| 27 | Safety | Ground fault protection(with external RCBO Type A) | B |
| | | Overvoltage and undervoltage protection | ✓ |
| | | Overcurrent protection | ✓ |
| | | Upstream protective conductor monitoring | ✓ |
| | | Output PE continuous continuity checking | ✓ |
| | | Surge protection：4kV | ✓ |
| | | Output short circuit protection | External |
| | | Contactor welding monitoring | ✓ |
| | | Temperature monitoring | ✓ |

## 5. TECHNICAL PARAMETERS

| SN | Items | Technical parameters | 7kW single phase |
|---|---|---|---|
| 28 | Standard | IEC/EN 61851-1:2017<br>IEC 61851-21-2:2018<br>IEC 62196-1:2014<br>IEC 62196-2:2016<br>IEC 62955-2018<br>IEC 61439-7-2018 | ✓ |
| 29 | Environmental data | Housing: RoHS compliant | ✓ |
| 30 | Dimensions | Length, width and height | 430x300x175mm |

## 6. TRANSPORT

The transport equipment used must be able to support the weight of the loader.

Note During transport, make sure to keep the charger in the direction indicated on the case, never tilted or upside down.

## 7. INSTALLATION CONDITIONS

1. The distance to other equipment should be at least 1 meter.
2. The device must be mounted on a comcrete pad.
3. Installation Environment -30℃~ 50℃.
4. Air relative humidity 5% - 95%.

## 8. UNPACKING

| | | |
|---|---|---|
| Before unpacking, make sure that the charger is in the direction indicated on the on the box. | Confirm that all components are inthe package. | When unpacking,please handle with care. |

## 9. OUTLINE OF DRAWING

## 10. BOX CONTENTS

| Item | Quafitity |
|---|---|
| Intelligent charger | 1 |
| Install backplane | 1 |
| Hook | 1 |
| Bolt M6*70 | 8 |
| Key | 1 |
| Charging Card | 3 |
| Certificate | 1 |
| User manual | 1 |

| Item | | |
|---|---|---|
| Install backplane | Hook | Bolt M6 *70 |
|  |  |  |
| Key | Charging Card | Certificate |
|  |  |   |
| User manual | | |
|   | | |

## 11. 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 matchconduit size
- Spirit Level

### The following hardware may also be needed

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

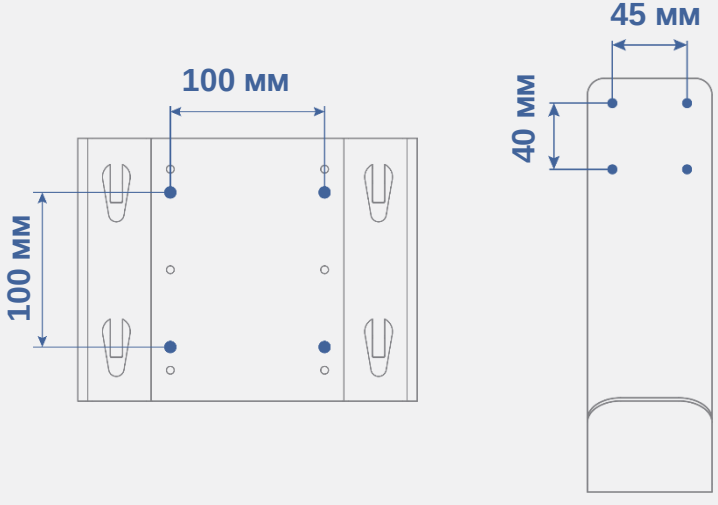
## 12. WALL INSTALLATION

### Step 1

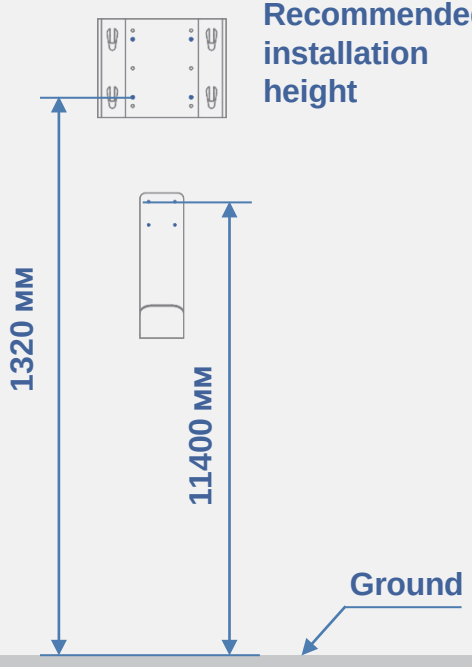
Select a place to mount the product on the wall and determine the location for the holes. Next, drill the holes using a hammer drill.

**Bolt M6×70**

**Drill a hole 8mm in diameter and 80-90mm deep.**



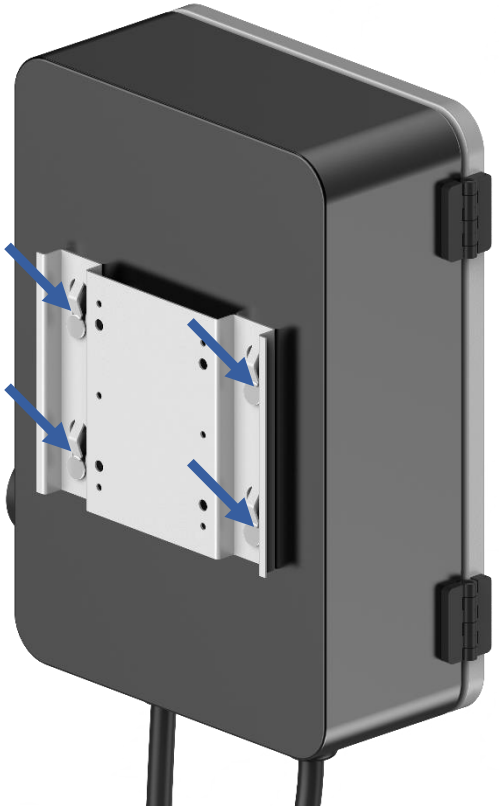

**Recommended installation height**



## 12. WALL INSTALLATION

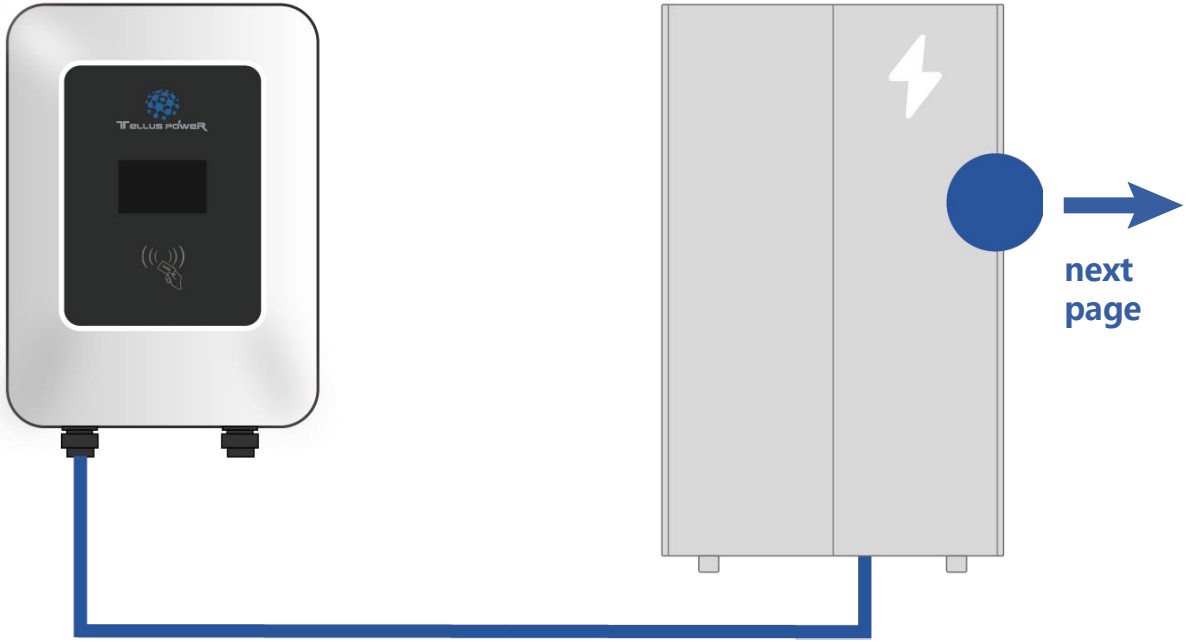
### Step 2

Align the hook on the back of the charger with the hole and install it.



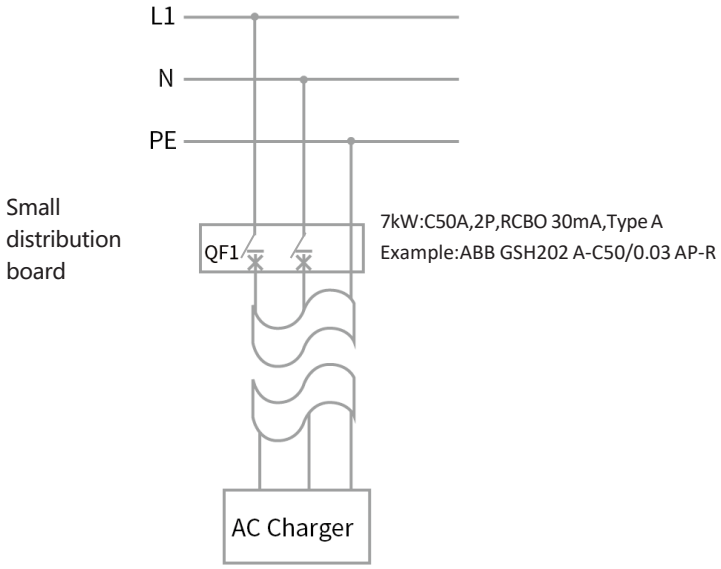
## 13. INPUT CABLE

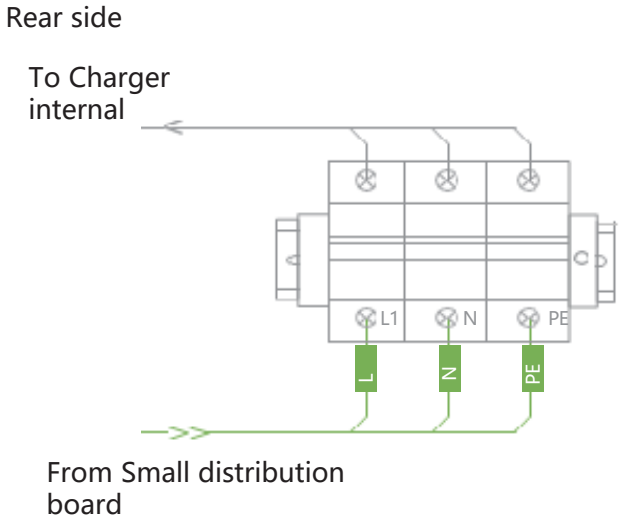
The input cable is connected to the plastic case circuit breaker and grounding copper bar in the charging pile from the local power distribution network.



## 14. INPUT CABLE INSTALLATION

### For Model: TP-EVVA-80A



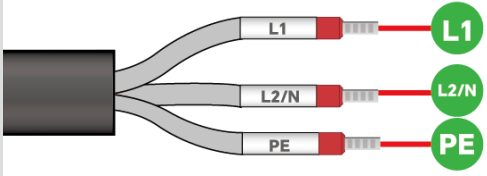



## 14. INPUT CABLE INSTALLATION

### For Model: TP-EVVA-80A

The cables consist of L1/N/PE and the input power supply connections must meet the requirements of local standard.
Independent circuits must be used for chargers, and cannot be shared with other devices.
The cable must be made of braided copper insulated wire with a minimum diameter of 6 $mm^2$.

RCBO type A should be used in the distribution board. The values of the rated conditional residual short-circuit current should be great then 6 000 A and withstand $I^2t$ value should be less than 80000 $A^2s$.




Connect the L1/N/PE cable (input cable) to the local distribution network.

## 15. FUNCTION DESCRIPTION

# 16. OPERATION INSTRUCTIONS

## INTRODUCTION TO ICONS

During the operation of the charger, icons will be displayed on the interface. The icon is explained as follows:

The charger communicates with the master station through a wired network.

## STANDBY MODE

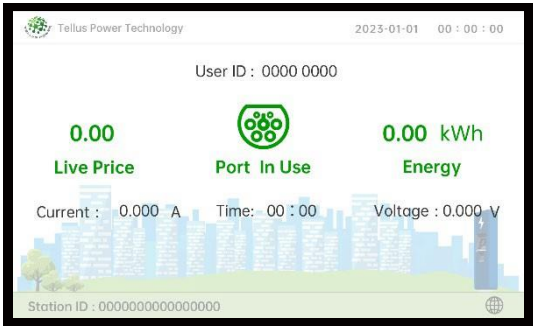
When the charging station is in standby, The screen prompts you to swipe your RFID card, After swiping the card, the screen prompts to plug in the gun to charge, and the device number is displayed at the bottom of the screen.


Please use RFID / Mobile App

# 16. OPERATION INSTRUCTIONS

## PLUGGED GUN CHARGING

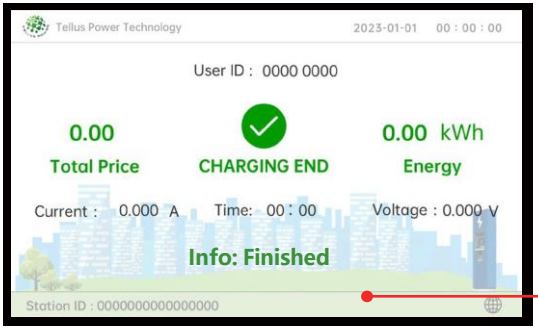
After the system detects that the charging gun is fully plugged in and docks with the electric vehicle, it starts charging. And the following interface pops up to enter charging.



# 16. OPERATION INSTRUCTIONS

## Stop Charging

The user swiped the card again, after the charger settles according to the electricity consumed by the user, it releases the charging gun locked during the charging process and displays the settlement interface.




**Info: Finished**
**Please remove the gun**

# 16. OPERATION INSTRUCTIONS

## Back to the standby mode

Unplug the charging gun, wait 5 seconds, and the interface returns to standby mode.


Please use RFID / Mobile App

## 17. List of Error Codes

The charger shows its status via the display. In the event of specic faults, refer to the following table:

| DISPLAY ERROR | ERROR DESCRIPTION |
|---|---|
| **RFID Reader** | RFID card reader fault |
| **Ground Failure** | Grounding fault |
| **CC Error** | CC error |
| **CP Error** | CP error |
| **Emergency Stop** | Emergency button actuated |
| **Meter Failure** | Electric meter failure |
| **Under Voltgage** | Undervoltage |
| **Over Voltage** | Overvoltage |
| **Battery Full** | Battery loaded (low current for ten minutes) |
| **Over Current** | Overcurrent |
| **DeAuthorized** | Authentication Fault |
| **Error: CCID Trip** | Leakage fault |

## 18. WARRANTY

### Warranty and Service Plan

Tellus AC chargers comes with the 2 years parts only standard warranty(actual warranty length is subject to sales contract). However, we offer serviceplans which covers parts and labor as well for an additional add-on fee. We can train your operators or engineers and equip with basic understanding of the troubleshooting and part replacement to make sure the equipment downtime as well as total cost of ownership is minimized.

### Warranty Terms

LIMITED WARRANTY: Subject to the exclusions from warranty coverage set forth below, Tellus warrants that the Product will be free from any defects in materials and/or workmanship (the "Limited Warranty") for a period of one year after 30 days from the date of shipment or from date of the initial installation whichever is earlier (the "Warranty Period"). If the Product becomes defective in breach of the Limited Warranty, Tellus Power will, upon written notice of the defect received during the Warranty Period, either repair or replace, at Tellus Power's choice, the Product if it proves to be defective. Tellus Power will also pay for shipping charges for the failed part. If the returned part has not failed the customer will pay for shipping charges for the replacement part and the associated returned part. Under this guarantee, Tellus liability is limited to repair or replacement of the product with the same or equivalent, or reconditioned product warranted for the original warranty period. The warranty will not include removal costs, reinstallation costs, loss of charging station revenue, nor loss or damage of any kind whatsoever, whether incidental, consequential, or otherwise.

## 18. WARRANTY

### 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 Tellus, and causes other than manufacturing defects not covered by the warranty.
- Force Majeure – any occurrence or extraordinary event or circumstance beyond the control of Tellus Power 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 Tellus Power.
- 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.

## 18. WARRANTY

### 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 Tellus 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 Tellus Power Green.
- Tellus 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 Tellus installation and maintenance procedures.
- Maintenance or use that is not in accordance with Tellus installation and maintenance procedures.
- That has been subjected to incidental or consequential damage caused by defects of other components of the electrical system.

## 19. 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 Tellus shall void Tellus 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 Tellus 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 Tellus operating and maintenance instructions.

## 20. CONTACT US

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For any support on installation and commissioning, please contact below

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