



20KW DC Charging User Guide



Model:
EVD-20S-P

Please read this manual carefully prior
to your use of your EV Charger.

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ATESS Power Technology has the final interpretation of this user manual. The product specification may be updated from time to time and is subject to change without prior notice!

Thank you for choosing Project EV Charging Equipment

Project EV/ATESS EVD series intelligent DC charging equipment is a device that provides high-efficiency, safe and stable DC power supply for electric vehicles, which has a friendly man-machine interface and integrates corresponding functions of control, billing, communication and security protection. The mode charging equipment uses OCPP 1.6JSON open protocol for communication with back-office server, thus to realize functions such as reservation and network payment via mobile APP.

Diversified communication options, including wired Ethernet, WIFI, 4G wireless, are provided for customers to conveniently connect the device to a charging network.

We sincerely hope that this product can meet your needs, and we welcome and value your feedback and suggestions on the performance and function of the product. We will continuously improve the quality of our products and services.

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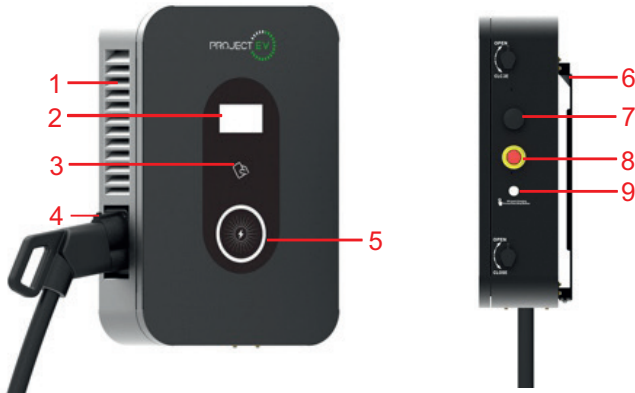
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Product Description



- | | |
|-------------------|--------------------------|
| 1. Air Intake | 6. Mounting Bracket |
| 2. Screen | 7. WIFI/4G Antenna |
| 3. RFID Reader | 8. Emergency Stop Button |
| 4. Lead Holder | 9. Start or Stop Button |
| 5. LED Indicators | |

Explanation of LED Indicators

Blue - Standby

(The charging equipment can only be used when the blue light is lit)

Red - Steady on/flashing

(Fault)

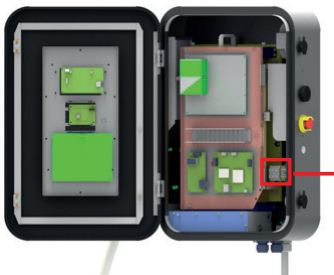
Green - Steady on

(Charging in process)

Green Flashing - Establishing communication

Yellow Flashing - System Initialising

Internal view and terminal definition



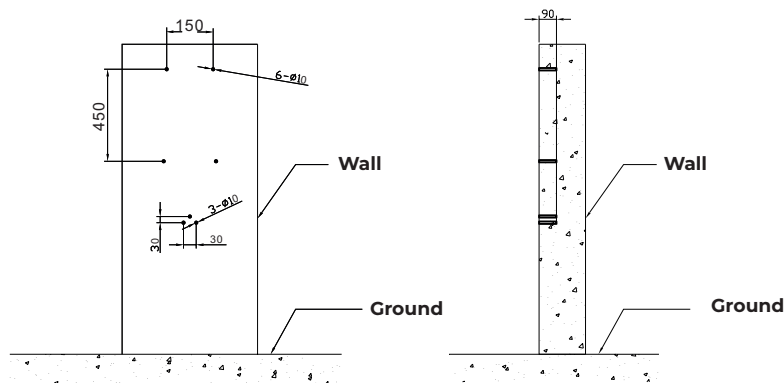
1. AC input terminal block. Terminal Definition is (① L1; ② L2; ③ L3; ④ N; ⑤ E) from right to left.

Item	Quantity	Remark
Mode Charging Equipment	1	
User Manual	1	
Certificate of Quality	1	
Mounting Bracket	1	Already installed on the rear side of the charging equipment
Cable Holder	1	
Hex Head expansion bolt, M8*80/304 stainless steel	7	

Installation and Wiring

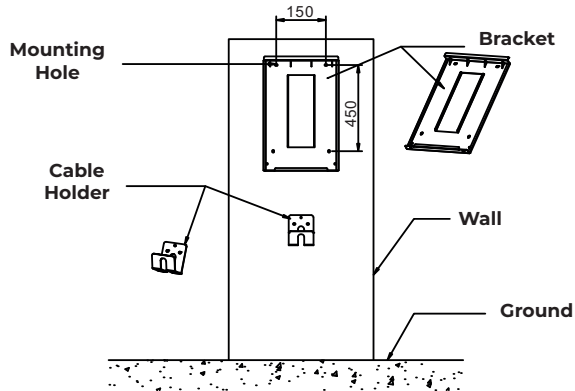
1. Firstly, according to regulation BS7671 18th Edition, the screen should be 1.2m-1.4m from the ground. Ensure you isolate the supply in the distribution panel before repairing or maintaining the charger.

According to the dimensions in the following drawings, drill 4 holes for bracket mounting and 3 holes for holder mounting on the wall. Take out the expansion bolts in the packing accessory bag, screw the expansion bolts into the holes. Remove the nuts and washers for later use.



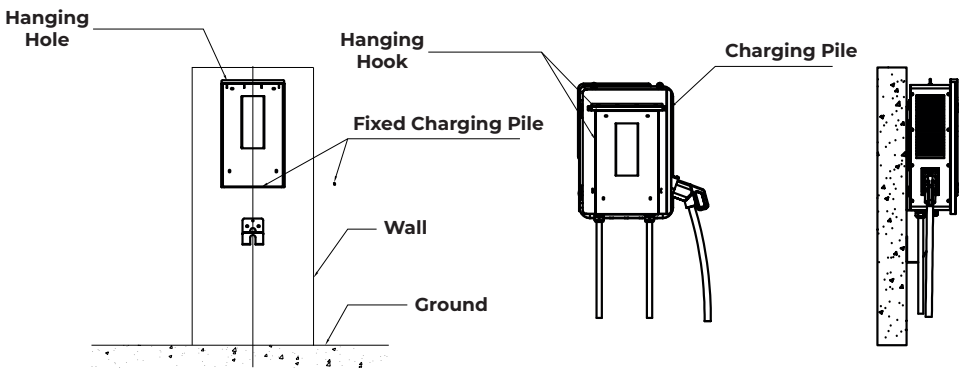
Drill holes in the wall

2. Loosen the two screws at the bottom of the charging equipment that fixes the mounting bracket. Keep them safe for later use. Bolt the mounting bracket onto the wall using the fixings provided. Mount the holder using the same procedure.








Mount the bracket and cable holder

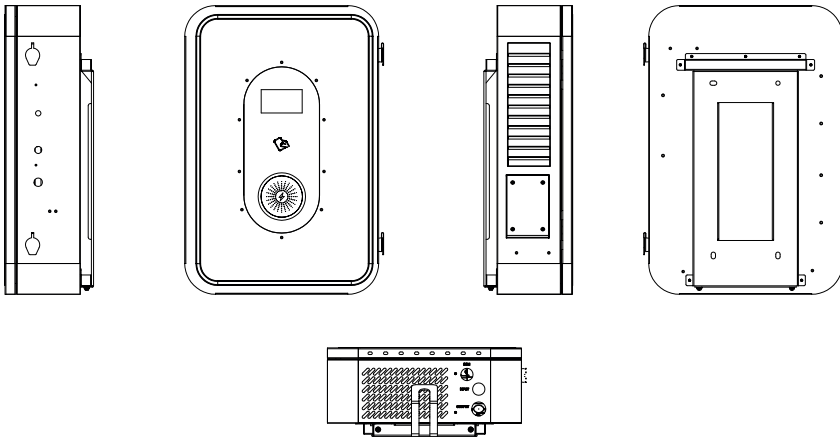
3. After the mounting bracket and cable holder are fixed, place the charging equipment onto the mounting bracket, with the outward curved part inserted onto the slot on the rear side of the charging equipment. Lock the charging equipment onto the bracket at the bottom using the two screws you removed earlier. The installation process is then complete.



Insert the hanging holes of the charging pile into the hanging holes and install in place

4. Using a suitable cable, we suggest you use a 5-core cable(with CPC included). For your convenience, a cable gland is provided. Unlock the unit, and open the door. Connect the cables into the terminal block, through the cable gland on the bottom right-hand side and secure them. (If hard wiring your internet connection, connect the network cable through the second cable gland to the RJ45 socket and tighten glands accordingly). Ensure all internal wiring is secure and correct, and all breaker positions are on, then close and lock the unit. The wiring is now complete.

	L1	L2	L3	N	CPC
Terminal					



Installation and Wiring

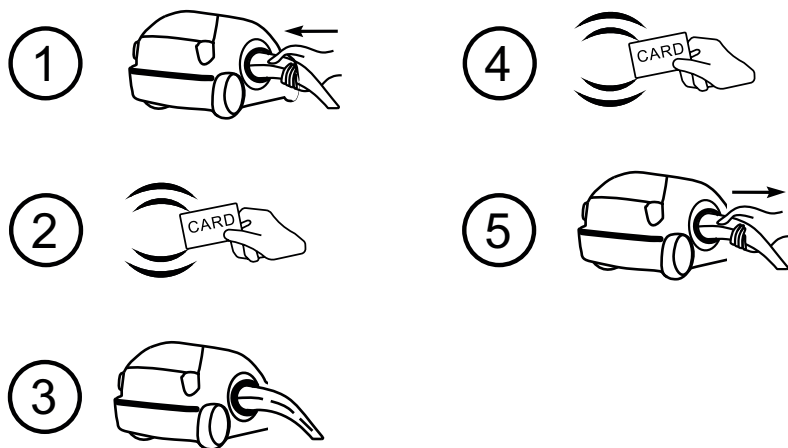
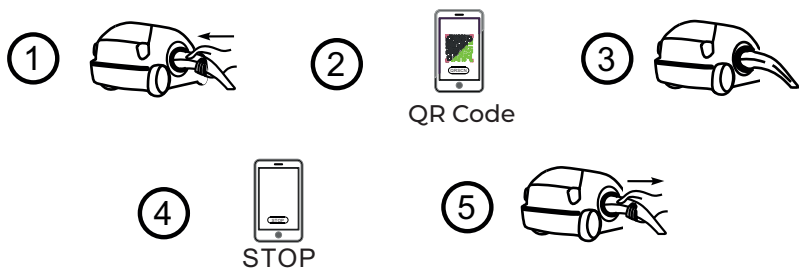
1. Final connections should only be undertaken by skilled persons. Connect the cables in the correct sequence according to the markings on the terminal block.
2. The CPC must be connected to the Earth terminal securely.

Operation Instruction and LCD Introduction

Charging mode and operation

APP/RFID Mode:

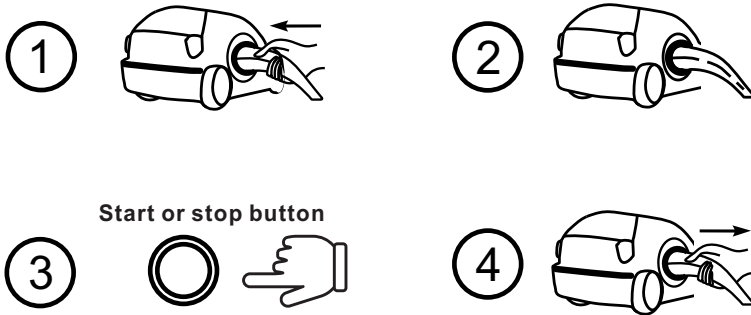
Start or stop charging by scanning QR code using the APP or by swiping the RFID card. You can also use the APP for reservation and payment, provided that the back-office server supports that function.



APP/RFID mode operation process flow

Plug and Charge Mode:

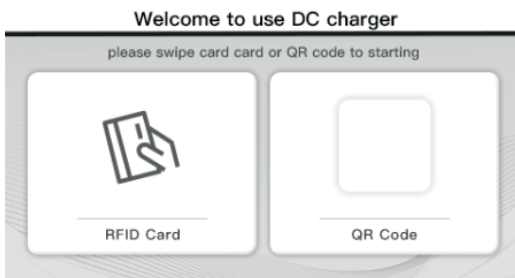
To start charging press the silver button on the side of the unit, once the car has been plugged into the charger. The charge will then start. If you want to stop the charging, press the silver button on the side of the charger.



Plug & Charge mode - operation process flow

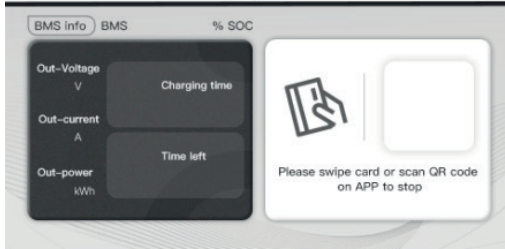
LCD Interface Introduction

The charging equipment is equipped with a 4.3 inch screen. The content is displayed as below:



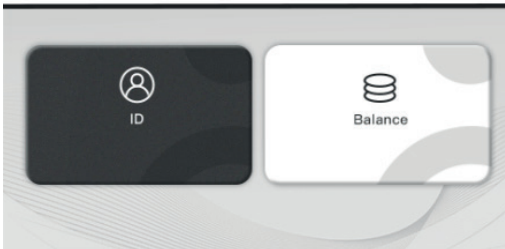
When powered up, the charging equipment will show this display.

DC charging information



Charging information, which will show the status of the charging equipment, such as standby, charging and fault.

Card information



Customer card account number and balance.

Fault Codes

The table below outlines the type of faults which may appear on your EV charger.

No.	Fault Description
1	Emergency stop is activated
2	Over temperature fault
3	Power module communication fault
4	Meter communication fault
5	DC output overvoltage fault
6	DC output overcurrent fault
7	Waiting for BMS communication timeout
8	Insulation detection timeout
9	Insulation detection fault
10	Polarity
11	DC+ contactor fault
12	DC- contactor fault
13	Charge lead disconnection fault
14	Plug head connection over temperature fault
15	AC input overvoltage
16	Ac input undervoltage
17	BMS communication fault

Charger Specification

Model	EVD-20S-P
Dimension (mm)	840*565*410 (WD*H)
Weight (KG)	50KG
Display	LCD
Casing Material	Stainless steel & acrylic sheet
AC Input	
Grid Connection	400V, 3 phase
Voltage	AC 320~485V
Current	32A
Frequency	47~63Hz
DC Output	
Plug Type	CCS
Voltage	DC150~1000V
Current	0-50A
Voltage-stabalizing Accuracy	0.5%
Current-stabilizing Accuracy	$\leq \pm 1\%$
Power Factor	0.98
Efficiency	$\geq 94\%$
IP Degree	IP54
Working Environment	-25~+50, derate since 50
Relative Humidity	5%-95%
Altitude	2000m, derate for higher than 2000m
Cooling Method	Forced Air Cooling
Remote Monitoring	Ethernet/WIFI/4G/RJ485
Payment	APP/RFID
Standby Power	25W
Standards	IEC-62196-1; IEC-62196-3;
Mounting	Wall or Stand
Certificate	CE
Metering Accuracy	0.5
Protection Features	
Over/Under Voltage of AC Output	YES
Over Voltage of DC Output	YES
Over Temperature Protection	Derate since 55 ; Stop at 75
Short Clrcuit Protection	YES
Emergency Stop Protection	YES
Surge (SPD) Protection	Type 2

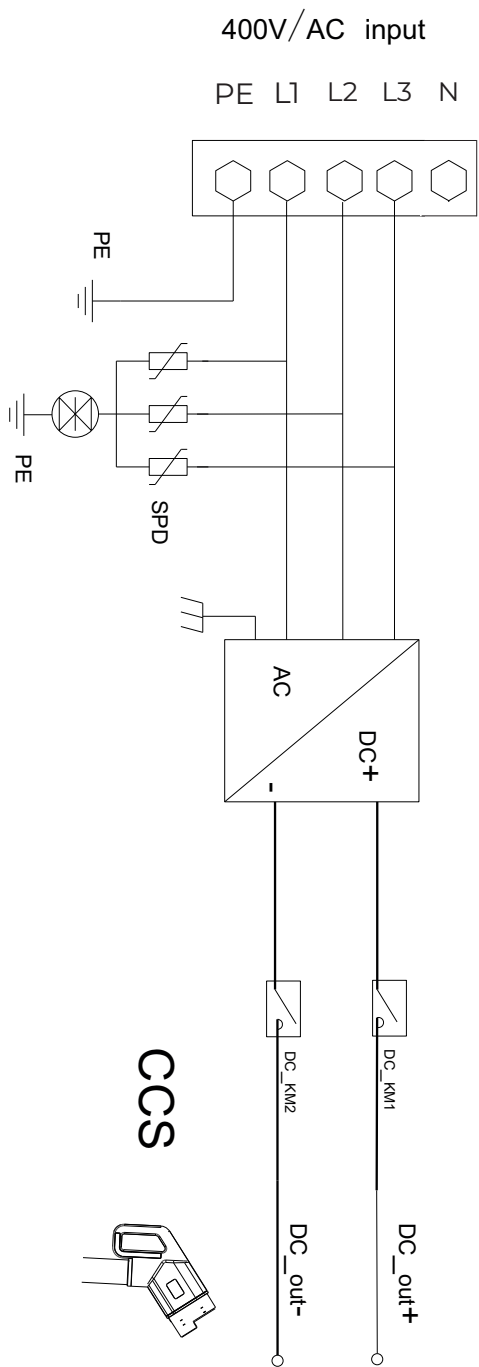


Fig7-1, Main circuit diagram

5 Year Warranty Statement for ATESS EV AC/DC Chargers Authorized Warranty Installer (valid from 01.December.2020)

(These warranty terms are only applicable to UK consumers only for the ATESS EV chargers, bought through the authorized repair and installation partner)
Welcome to Project EV and ATESS, and thanks for choosing our Electric Vehicle charge point.

All our products are backed by a 5-year warranty (3-years parts and labour plus 2 years parts) giving you years of trouble-free charging.

However, in the unfortunate circumstances where something does go wrong, we are here to help and get you up and running as soon as possible.

Electric vehicles are changing all the time and even what appears to be the same manufacturer, model and year can have different battery and software configurations, we understand this can be frustration but sometimes the problem can lie with the vehicle and manufacturer.

With this in mind, we have developed a product that allows our company to make changes remotely and update chargers to keep them running at their optimum and in step with the latest electric vehicles on the road.

All we ask is that you follow the process below and make a number of small checks prior to calling or email the team.

- It sounds obvious but check the emergency stop button has not been activated.
- Check the RCD on the unit.
- Check the consumer unit in the property.
- Check all cables are installed correctly and are not loose or have been damaged.
- Check power cable to the vehicle.
- Check the manufacturers charging guidelines (doors may need to be locked and the vehicle alarmed etc.)
- Make sure the vehicle software is the latest version, please refer to the manufacturer guidelines.
- Please make sure the charger is online – we will not be able to remotely access or diagnose faults if it is not.
- Call 0800 599 9582
- Email enquiries@projectev.co.uk please take pictures or videos
- If we cannot diagnose the fault we will aim to get an engineer to your charge point location to rectify your problem with a replacement or fix the issue (we will not call out to solve or fix Wi-Fi or connectivity problems, please refer to your original installer.

1. Warranted Products

This 5 Year limited warranty shall only apply to EV Chargers AC/DC only installation up to 300kW installed and provided by an Authorized 5 Year Warranty Installer.

2. 5 Year Limited Warranty

A. 5 years Limited Product Warranty

ATESS warrants its EV chargers, known as 'ATESS Products' here after including factory-assembled charger sockets, charger plug and cables, if any, to be free from defect in materials and workmanship which would impact the functionality of the product under normal application, installation, use and service conditions.

The duration of this limited warranty is for life from the date of delivery in the original packing to the first customer (CUSTOMER) of the ATESS products, or latest 6 months after manufacturing date, the earlier time between the two.

Claims under the warranty can only be accepted if the buyer can provide the proof that the malfunctioning or non-conformity of ATESS Products results exclusively from defects in materials and/or workmanship under normal application, installation, and use and service conditions. If an ATESS Product fails to conform to this warranty, ATESS will, at its option, either repair or replace the product. In the event that a like for like replacement is not available and upgrade may be offered at an additional customer cost.

A.1 Product warranty within / up to 3 years

If, within a period of three (3) years, the costs belonging as below:

Items	Spare Parts	International Transportation	On-site service (If needed)	Other Service
Cost belonging	ATESS	ATESS	ATESS	Installer/User

A.2 Product warranty from year 3 to 5

If, after a period of three (3) year, the costs belonging as below:

Items	Spare Parts (Except DC Charger)	International Transportation	On-site service (If needed)	Other Service
Cost belonging	ATESS	ATESS	ATESS	Installer/User

*ATESS provide a 5 years or 30,000 hours spare parts warranty for all DC chargers.

3. Exclusions and Limitations

The aforementioned “Limited Warranty” does not apply to any ATESS Products which have been subjected to:

A. If the direct customers who has obtained the ATESS Products from ATESS or its distributor failed to pay the ATESS Products according to the purchase price, ATESS is entitled to reject the claim under this warranty based on this provision.

B. Cosmetic change in appearance stemming from the normal wear and tear over time of product materials, for example the out casing, charger sockets, charger plug, cables and so on.

C. Installation on mobile or in a marine environment, or extreme thermal environment, damage caused by ammonia, high air pollution, acid rain or any other abnormal environment that beyond ATESS's control;

D. Misuse, abuse, neglect or accident, alteration, improper installation or application, Improper or unauthorized repair or modifications, power failure surges, lightning, flood, fire, accidental breakage or other events outside ATESS's control.

E. Service or installation by unapproved technicians who are not qualified under the relevant law or made illegible regulations at the place of installation.

F. Installation by none approved company or person

G. ATESS Products for which the nameplates or serial number have been altered, removed or made illegible.

H. ATESS Products which have been moved from their original installation location without the express written approval of ATESS.

I. Defective components in the construction on which the ATESS Products are mounted.

J. Wi-Fi connectivity, internet connectivity or APP connectivity is not covered or any associated connectivity issues

K. The Warranty is nontransferable.

L. Any subsequent costs or losses associated with the ATESS EV charge point.

M. Future proofing new Electric Vehicle software compatibility.

4. General Conditions for Warranty Claims

A. The direct customers who have obtained the ATESS Products shall register the ATESS Products and upload the information within 30 days from the date of receiving the ATESS Products. If the customers fail to register the product before the deadline, the Limited Product Warranty will remain at 3 years. The warranty registration can be done either through the APP or via the website.

B. The direct customer shall notify the warranty claims to Authorized 5 Year Warranty Installer or its Distributor within 1 week via email only after becoming aware of the circumstances which constitute a warranty case. The report shall include the following information:

1. Name and address of the END CUSTOMER
 2. Name and address of the INSTALLER or SELLER
 3. A copy of the purchase agreement or installation agreement
 4. Module type and serial number of the respective ATESS Products
 5. Address of the place of installation of the respective ATESS Products
 6. A short description of the problem at hand as well as a short description of the tests which may have already been performed as well as their results.
 7. Regarding any defect or fault, where possible, pictures and videos of the effected ATESS products clearly showing the problem or fault.
- C. Any repaired or replaced ATESS Products provided by ATESS under a warranty claim, shall be covered by the same Limited Warranty and terms as the first ATESS Products purchased.
- D. No warranty periods or terms shall be extended because of a warranty claim or remedy.
- E. The Limited Warranty does not cover any transportation costs for return of the defective ATESS Products or for reshipment of any repaired or replaced ATESS Products or costs associated with installation, removal or re-installation of repaired, replacement or additional ATESS Products.
- F. The Limited Warranty does not cover any other costs, loss of use, loss of profits, and loss of production, loss of revenues associated with performance or non-performance of defective ATESS Products.

G. If the authorized partner should cease to trade the warranty reverts to ATESS standard UK warranty which can be viewed online at www.atesspower.com. The warranty is only valid through a valid Authorized 5 Year Warranty Installer directly. ATESS will not cover any product unless it goes through an Authorized 5 Year Warranty Installer. ATESS Warranty is with and for the Authorized 5 Year warranty installer. This product is covered by authorized partner.

H. 5 Year Warranty only applies to products installed by an Authorized 5 Year Warranty Installer.

I. An upgrade may be offered at an additional cost should the product or the components be unavailable at an additional cost.

J. Refurbished or factory reconditioned products may be used in part exchange.

K. No responsibility will be taken by ATESS for fluctuations in voltage supplied from the National Grid that may affect performance and may cause the EV charger to fail or fault.

- L. An approved installation or technical partner must be used, none approved third party invalidate this warranty in full.
- M. A call out costs and labor charges will be applicable in all cases.
- N. The EV charger must be accessible by ATESS and the consumer to read any faults.
- O. The EV charger must be online and have latest firmware, and make sure the authorized installer can diagnosis potential faults and settings remotely or further labor costs will be required.
- P. The units must be connected so remote analysis can be confirmed or further charges may be required
- Q. Replacement product for warranty claims can only be honored through an Authorized 5 Year Warranty Installer; in this case ATESS has the right to terminate claims over and above its standard terms and conditions if claims do not come through Authorized 5 Year Warranty Installer Ltd.

5. Dispute regarding a material defect or a reduced power

In case of a dispute regarding the existence of a material defect or reduced power in a warranty claim, ATESS will accept the judgment of an accredited testing institute (which is to be selected by ATESS in advance.) The cost and expenses for the testing shall remain with the Buyer if it is found to be good performance.

6. Force Majeure

ATESS shall not be responsible or liable in any way to the Buyer for any non-performance or delay in performance under this Limited Warranty due to occurrences of force majeure such as, war, riots, strikes, epidemic, unavailability of suitable and sufficient labor, material, or capacity or technical or yield failures and any unforeseen event beyond its control, including, without limitation, any technological or physical event or condition which is not reasonably known or understood at the time of the sale of the defective Product(s) or the notification of the relevant warranty claim under this Limited Warranty.

7. Validity

This Limited Warranty shall apply to ATESS Products (s) manufactured after 1st of Jan 2020. This Limited Warranty shall be valid until a new revision is issued by ATESS and is subject to change without prior notice.

8. Others

EV charger spare parts and service costs are assessed each year, subject to the latest prices. ATESS reserves the right to interpret other unmentioned matters.

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9. Contact

In the first instance please contact your installer or failing this please contact Project EV

<https://www.projectev.co.uk/>

Contact Information



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