



AC 21kW Wall Mounted



Contents

CONTENTS	2
ATTENTION	3
STATEMENT.....	6
BEFORE USE	7
1.1 OPENING CONFIRMATION.....	7
1.2 EV CHARGER.....	8
OPERATION INSTRUCTIONS	13
2.1 OPERATION METHOD	13
2.2 PRECAUTIONS FOR USE	17
INSTALLATION INSTRUCTIONS	18
3.1 INSTALLATION PREPARATION	18
3.2 INSTALLATION PRECAUTIONS	19
3.3 STRUCTURAL INSTALLATION	20
3.4 WIRING AND EARTHING	22
3.5 ETHERNET CABLEINSTALLATION	23
3.6 DEBUG DETECTION	24
TROUBLESHOOTING	25
4.1 DEVICE ABNORMAL DISPLAY	25
4.2 FAULT CODES	25
4.3 STOPPING REASON CODES	26
4.4 COMMON TROUBLESHOOTING METHODS	27

AFTER-SALES SERVICE (REPAIR)	28
5.1 REPAIR/REPLACEMENT OF PARTS	28
5.2 UPGRADE METHOD.....	28
5.3 REPAIR AND TRAINING.....	28

Attention

To prevent accidents from causing damage to your personal and property, the following statement should be made on matters needing attention.

- Distinguish and explain the degree of injury and damage caused by misuse of this product.



The sign indicates the relevant content of "most likely to lead to death or serious injury".



The sign indicates the relevant content of "most likely to cause injury or property damage".

- The following graphic markers are used to illustrate the matters to be complied with.





The sign means "content strictly prohibited".






The sign means "content must implement"



Instructions for CL5435 Charger

	It is strictly forbidden to approach dangerous articles such as flammable, explosive or combustible materials, chemicals, combustible steam to the charger.	It may cause a fire
	It is strictly forbidden to disassemble, repair or refit the charger beyond the scope of the instructions.	Improper operation may cause charger damage, leakage, leakage of electricity, and serious casualties
	It is strictly forbidden to use charger when cracks, wear, rupture or bare charging cables occurred on charging plugs or cables. (If the above dangerous situation is found, please contact the after-sales personnel in time)	Accidental injury caused by electric shock
	It is strictly forbidden to touch the core of charger plug with hand when charging.	
	It is strictly forbidden to use the charger in bad weather.	
	It is strictly forbidden to open the cabinet door when charging.	
	Children are advised not to approach or use charger.	
	If fire, electric shock or other abnormal conditions occur during use, the EMERGENCY stop button should	If the EMERGENCY stop button is not

Attention

	be pressed immediately.	pressed, casualties may occur.
 ATTENTION		
	Please charge the car after it is out of fire. During the charging process, the vehicle is forbidden to start.	Charger could be damaged
	Keep the charging plug clean and dry. If there is dirt, please wipe it with a clean dry cloth after power off.	Dirt will damage the protection device of charger and shorten its service life.
	If the LED shows machine failure (turn red), please contact the after-sales personnel first, and do not operate blindly.	Charger could be damaged
	When there is water on the surface of the charger, please do not open the covershell of charger.	

Statement

Statement :

1. This product is only used for EV charging.
2. If there are any changes in the contents and specifications of this instruction, please refer to the information published on the company's website. The final right of interpretation belongs to the company.

Before Use

1.1 Opening Confirmation

■ Abstract

CL5435series AC charger is mainly used for AC charging of electric vehicles. This series of products can be flexibly configured from 11 kW to 22 kW power output. Suitable for residential and industrial environment. It can be used for private use and public charges. The product complies with IEC 61851-1、IEC 61851-21-2、IEC 62196-1、IEC 62196-2 standards.

■ After unpacking, please confirm

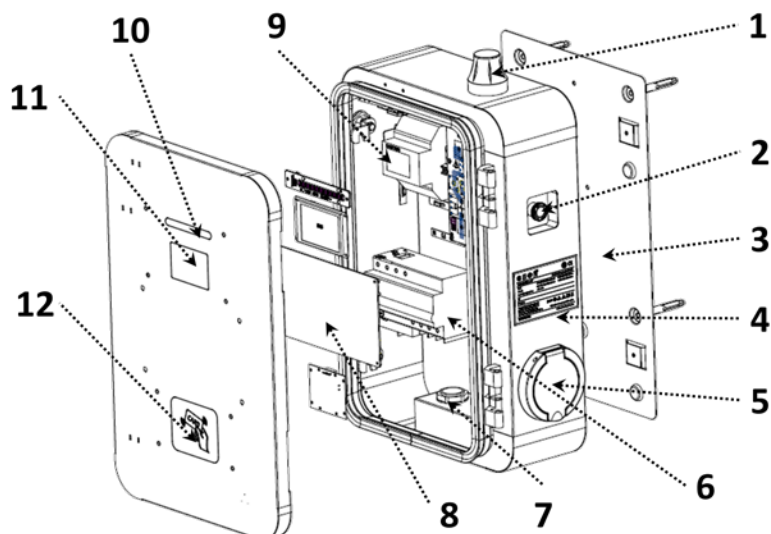
- Does EV charger match the model which you purchased?
- Is there any damage on the EV charger, include plug, cable and main body?
- Please check whether the attached accessories are same as accessories list.

Note: Please keep the packing box and materials for future handling.

If discrepancies are found, please contact us.

1.2 EV Charger

■ Name of parts



S/N	Instructions	S/N	Instructions
1	4G/WIFI/BT antenna	2	Emergency stop button
3	Installation backplane	4	Nameplate
5	Charging socket (Case B) Plug base (case C)	6	RCD
7	Inlet side waterproof joint	8	Main control board
9	AC meter (MID)	10	LED light bar
11	3.5-inch non touch LCD color screen	12	RFID card reader

Note : The appearance of the drawing is only for illustration. Different products may have different configurations. Please refer to physical objects.

■ Specifications and technical parameters

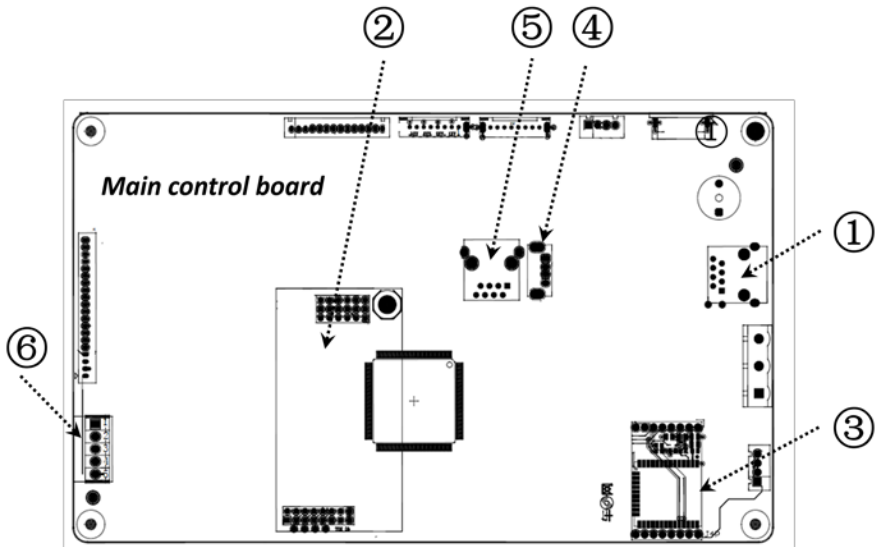
Name	Wall Mounted AC Charger		
Model	CL5435-A21A	CL5435-A21B	CL5435-A10A
Connect method	Case C	Case B	Case C
Power distribution	3P+N+PE		
Input Voltage (Vac)	AC400V±10%	AC400V±10%	AC400V±10%
Rated Power	22kW	22kW	11kW
Rated Current(AC)	32A	32A	16A
Frequency	45-65Hz		
Charge Connector	Type2 cable	Type2 Socket	Type2 cable
Cable Length	5m	/	3m
Enclosure	Sheet metal		
LED Indicator	Green/Yellow/Red		
Display	3.5" color screen (Optional)		
RFID Reader	Mifare ISO/IEC 14443 A (Optional)		
Starting Mode	Plug and Charge/RFID card/App		
Emergency Stop	YES		
Communication	Ethernet ; 4G/WIFI /Bluetooth (Optional) ;		
OCPP	OCPP1.6J (OCPP 2.0 optional)		
Energy Meter	MID certified		

Instructions for CL5435 Charger

Measurement accuracy	1		
RCD	30mA TypeA+6mA DC		
ingress Protection	IP54		
impact Protection	IK10		
EMC level	CLASS B		
ElectionctricalProtectio n	Over current protection , Residual current protection , Short circuit protection , Ground protection , Surge protection , Over/Under voltage protection , Over temperature protection		
Certification	CE		
Certification Standard	EN/IEC 61851-1:2017,EN/IEC 61851-21-2:2018,IEC62196-1 , IEC62196-2 ;		
Installation	Wall-mount/Pole-mount		
Operating Temperature	-25℃~+50℃		
Storage Temperature	-40℃~+70℃		
Humidity	5%~95%		
Altitude	≤2000m		
Product Dimension	320*158*490mm(W*D*H)		
Package Dimension	667*497*230*mm(L*W*H)		
Net Weight	13.5kg	11kg	12.5kg
Ross Weight	14.5kg	12kg	13.5kg
External Package	Carton		

Note: to support 3.5kW and 7kW charging, need single phase installation

■ Common communication interface



S/N	interface	comments
①	Ethernet interface	RJ45
②	4G/3G or WIFI(Optional)	4G/3G and WIFI modules cannot work at the same time; 4G and WIFI antennas are independent; 4G / 3G module needs to be configured with SIM card;
③	Bluetooth (Optional)	Choose between Bluetooth and WIFI module, Same antenna; Bluetooth start-up charging; Local maintenance.
④	USB interface	Local software and configuration parameter upgrade; Export running log.

⑤	Debugging interface	RJ45, Special for operation and maintenance personnel
⑥	485 or CAN	Reserved

■ Summary of Main Functions

Peripheral function	
Indicator	Green: Power supply; Yellow: Charging; Red: Fault
Emergency button	Emergent stop charging
Safety protection function	
Self-checking function	The status of the charging device is detected in real time, and the abnormal situation is reported in time.
Overvoltage/under voltage protection	Real-time detection of working voltage, when the charging device is in over/under voltage state, alarm and stop charging
Over current protection	Real-time detection of working current, when the charging device is in an overcurrent state, alarm and stop charging
Lightning protection function	Class C lightning protection, effectively protects the lightning damage caused by lightning in the thunderstorm
Leakage protection	Charger will detection the leakage, if the leakage is over a certain threshold, the charger will be tripping leakage circuit breaker.

Operation Instructions

2.1 Operation method

■ Charging steps



Step1: Plug In Charging Gun;The display interface switches to the startup mode prompt interface

Step2 :Start charging through app scanning QR code or card swiping;

Step3:When the vehicle is suspended (including full charge), the interface will stay in the vehicle suspension interface. You can stop charging through card swiping or app operation or Pull out the gun directly. The interface will enter the stop charging interface to display the charging record. After the countdown, The interface will enter the settlement interface.

Step4:Please complete the settlement within the settlement countdown time. After the settlement time is exceeded, the interface will enter the standby interface. The unsettled cards can be swiped again on the machine for settlement and unlocking.;

Step5: Pull out the charging gun and put it back in place;

■ Main Operation Interface



Standby



Startup mode prompt

Acc: 4002254351123456

Charging ...

Charged: 90	Min	S-Price: EUR01.00
Energy: 33.00	kWh	E-Price: EUR01.50
Power: 22.00	kW	Cost: EUR082.50

Card Start

Charger No.: 123456789

05-11 10:21

Charging

EV Pause	
PLz resume /UnPlug charging	
Charger No.: 123456789	02-18 09:30:27

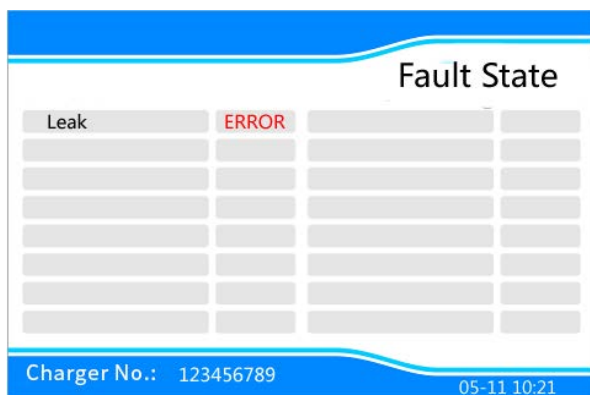
EV Pause

Count Down 9 Sec			
Acc: 4002254351123456		Balance info	
Charged: 90	Min	Service: EUR33.00	
Energy: 33.00	kWh	Elctricity: EUR49.50	
Balance: EUR9990.00		Cost: EUR82.50	
Charger No.: 123456789		05-11 10:21	

Settlement completed

Charge Stop			
Acc: 4002254351123456		Charge Stop	
Charged: 90	Min	Service: EUR33.00	
Energy: 33.00	kWh	Elctricity: EUR49.50	
Stp Reason: Contactor		Cost: EUR82.50	
Charger No.: 123456789		Card Start 05-11 10:21	

Abnormal charging stop



Self test fault alarm

2.2 Precautions for use

- Please confirm the voltage parameters of the EV before connection (the input voltage exceeds the rated voltage, which may cause the device to smoke or fire).
- Before connecting the charger to the EV, please make sure there is no water or foreign matter in the charging plug and the charging socket on the electric car.
- When the charging plug is connected to the vehicle and the charging indicator lights up, it indicates that the charging plug is in the charging state. Please DO NOT remove the charging plug at this time to prevent electric shock.
- Drivers and passengers should not stay in the car during charging.
- Pay attention to the strength when plugging and unplugging the charging cable. The force is too strong and prohibits violent insertion and removal.

- If the cable is damaged, please do not use it.
- During charging, if there is any odor, smoke, spark, or abnormal sound, vibration, electric leakage appear in the charger or vehicle, PLEASE press the emergency stop button to stop charging. It is strictly forbidden to directly disconnect the charging plug.
- Non-hazardous and special circumstances, do not press the emergency stop button at will.
- When the emergency situation is released, please turn the emergency stop button to restore, otherwise the charging cannot be continued.
- Please return the charging plug to the base on time after charging to avoid unnecessary damage to the charger.

For the safety of you and others, please use the series of charging devices correctly according to the usage described in this manual.

Installation Instructions

3.1 Installation Preparation

■ External preparation

Contact the owner to confirm the load and installation policy to support the installation of the charging device.

■ Installation basis

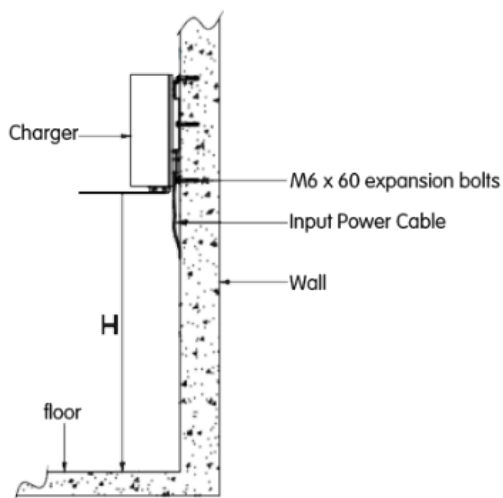
Wall mounted AC charger must be installed on reliable walls or special Piles.

3.2 Installation Precautions

- Please ensure that the foundation surface of the installation is flat and the strength meets the requirements before installation.
- Please open the charger box door before installation, check that the accessories are complete, the wiring is good, and there is no looseness;
- If the charger is installing or using at low temperature, there may be condensation of water droplets. Please don't using the charger until both inside and outside is completely dry. Otherwise, there is danger of electric shock;
- Please follow the wiring requirements and connect correctly;
- Please make sure the wires are tightly connected when installing, the foaming part is closely matched with the mounting surface, and the gap should be kept between 0.5-1mm after installation;
- Make sure that the power supply is well grounded;
- Please do not modify, add or change any parts for the charger by yourself in any situation.

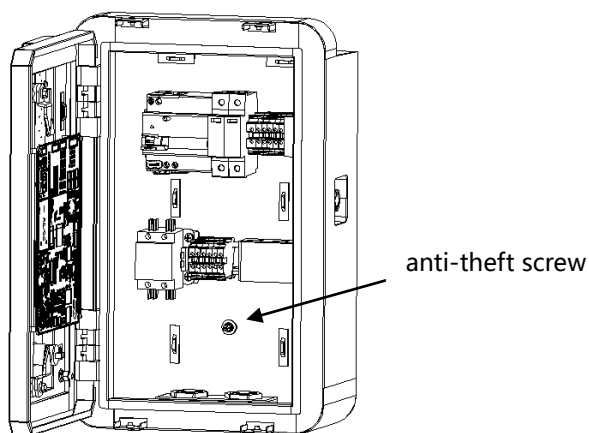
Note: This product must be installed by our company's maintenance department or our company's designated repairer. Our company is not responsible for any problems caused by the user's private installation.

3.3 Structural installation



Charger installation effect diagram (the illustration is for reference only, please refer to the actual product)

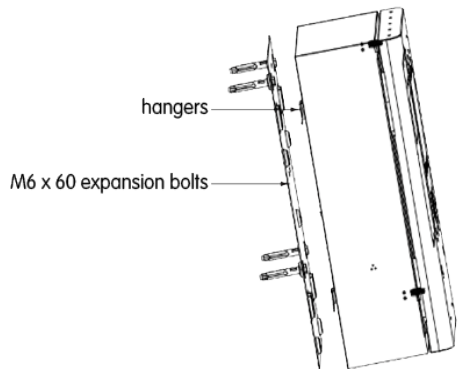
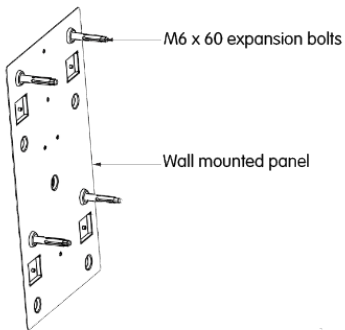
NOTE: The H can be customized according to the situation, the suggestion H = 1.2m



- ① Open the front door, unscrew the anti-theft screw and remove the wall mounted

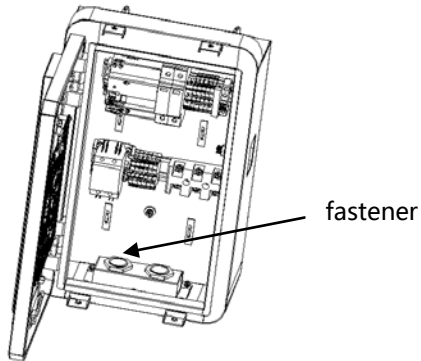
Installation Instructions

panel



② Take off the wall mounted panel, and Fixing on the wall with M6x60expansion bolts.

③ Fixing the hangers on wall mounted panel with screw



④ Thread the power line along the fastener in the figure above, and connect the power line according to the phase line prompt in the pile, Fasten well fastener, lock the front door.

3.4 Wiring and Earthing

Connect the single-phase three-wire or triple-phase five-wire power wire to the charging device, and note that the colors between the phase lines must correspond one-to-one, and the ground wire must be connected.

Recommended power line specifications :

Product model	CL5435-A21A	CL5435-A21B	CL5435-A10A
Wire diameter	5*10mm ² ; 8AWG	5*10mm ² ; 8AWG	5*6mm ² ; 10AWG
Cable terminal	E10-12	E10-12	E6012

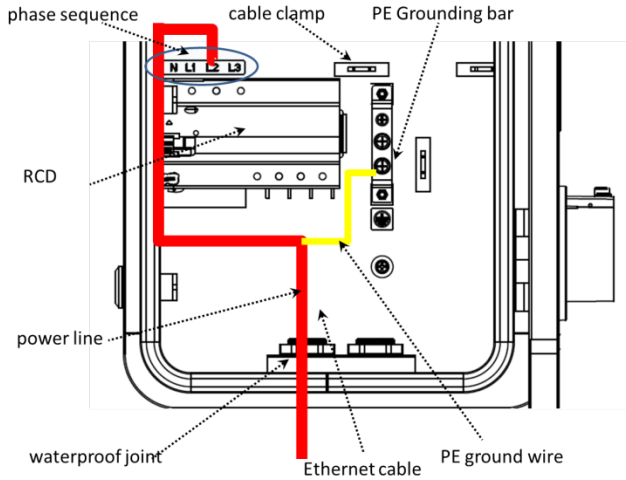
Note: Wiring and grounding must be performed by a professional electrician with an electrician's license.

The installation steps are as follows:

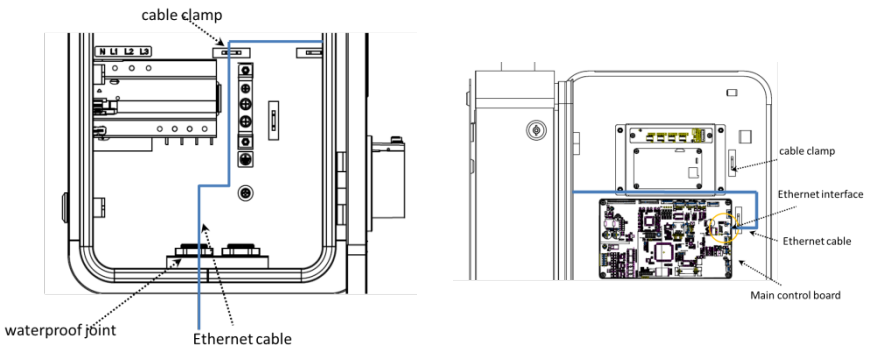
Step1: The power cable is connected into the pile through the waterproof joint on the left.

Step2: The incoming cable is wound to the upper end of the circuit breaker along the path on the left side of the pile.

Step3: Connected The power line to the relay according to the corresponding phase sequence of silk screen printing. Tighten the waterproof joint. Closing residual current protector.



3.5 Ethernet cable Installation



As shown in the figure above, introduce the Ethernet cable from the waterproof connector of the incoming line on the left at the bottom of the charging pile, lead the Ethernet cable to the Ethernet interface on the main control board on the door panel according to the wiring path indicated in the figure above, make the RJ45 connector, insert the interface, fix the cable and tighten the waterproof

connector of the incoming line.

3.6 Debug detection

After the charging device is properly installed, follow the procedure below to complete the debugging test (the debugging needs to be contacted with the manufacturer or operated by a professional):

1. Check if the incoming terminal, circuit breaker and contactor terminal screws are tightened;
2. Power on the charging device;
3. Turn the circuit breaker switch in the device to ON;
4. Use a multi-meter to measure whether the incoming power supply matches the input voltage of specifications and technical parameters.
5. Check whether the device indicator is powered on.
6. Insert the plug, follow the charging procedure, charge, check the indicator light and the screen status is normal;
7. At the end of normal charging, pull out the plug and complete the debugging test.

Troubleshooting

4.1 Device abnormal display

- Indicator (red light) ;
- screen (alarm information) ;

4.2 Fault codes

S/N	Code	Explication	Remark
1	Card:	Abnormal communication of card reader	
2	Screen:	Display failure	
3	OverVOLT:	Input overvoltage	Restore by power distribution recover
4	LessVOLT:	Input undervoltage	Restore by power distribution recover
5	OverCur:	Overcurrent	
6	Relay:	Relay failure	
7	OutPut:	Output contactor failure	
8	Emergency:	Emergency stop button pressed	Restore by rotating the button
9	door:	The door is open	
10	Leak:	Leakage protection	
11	PileTemp:	Over temperature protection	

Instructions for CL5435 Charger

12	PE:	PE cable break	
13	LN:	Reverse connection of L N line	Re-connect power cable
14	Meter:	Meter communication failure	
15	EleLock:	Electronic lock failure	
16	Other:	Other faults	

4.3 Stopping Reason codes

S/N	code	Explication	Remark
1	EV Pause	EV actively suspends charging, including full charging or reservation timing etc.	Non fault
2	Remote	Received the stop instruction from the platform	Non fault
3	Local	Normal stop triggered by the charging equipment side	Non fault
4	Balance	Reach the set charging amount	Non fault
5	AccErr	Billing data exception	Fault
6	Door	The door is open	Fault
7	Emergency	Emergency stop button pressed	Fault
8	Meter	Meter communication failure	Fault
9	Card	Abnormal communication of card reader	Fault
10	CP	CP signal of control pilot is abnormal	Fault
11	SPD	Lightning arrester failure	Fault

Troubleshooting

12	Input	Input power failure	Fault
13	EleLock	Electronic lock failure	Fault
14	Contactor	Output contactor failure	Fault
15	VolOver	Input overvoltage	Fault
16	VolLess	Input undervoltage	Fault
17	CurOver	Overcurrent	Fault
18	Leak	Leakage fault	Fault

4.4 Common troubleshooting methods

Problem	Possible reasons	Dealing methods
the LED indicator didn't on after power on	Powerfault	Please check the input power, is the input power on
		Please check the input lines, did them been connected correctly
the LED indicator is red shortly after power on	Self-testing after power on is fail	Please check the Emergency button, is the button been pushed and not released
		Please check the input lines, did them been connected correctly
the LED indicator turn red from green or yellow	Other fault	Connect after sell service

If you encounter other abnormal conditions or cannot resume normal use after completing the above operations, please contact customer service center to solve.

After-sales service (Repair)

5.1 Repair/Replacement of Parts

During the warranty period, due to defective or normal deterioration, the charger damaged or cannot be used normally. Our company is responsible for the maintenance, debugging or replacement of spare parts for the user. If it is found to have deliberate acts such as disassembly, impact, smashing etc. the damage will be repaired, commissioned or replaced with paid. After the warranty period, maintenance, debugging or replacement of parts should have been paid.

5.2 Upgrade Method

This product Software version and Operating parameters supports Upgrade via Local USB interface and via the platform remotely. If you need to upgrade your charger, please inform our after-sales personnel.

5.3 Repair and training

For charger repair and user training services, please contact our customer service support@t-power.com.au.

Hotline: 1300 772 678

Website: t-power.com.au evc.t-power.com.au