

# Electric Vehicle AC Charging station 7kW Instruction Manual



Please read this manual carefully before using the product, thank you for using this series of charging stations!

---

## Directory

Chapter 1 Product Overview.....	2
Chapter II Scope of Application.....	2
Chapter III Working Environment.....	2
Chapter 4 Features.....	3
Chapter 5 Product Parameters.....	3
Chapter 6 Installation Method and Dimension Drawing of Equipment.....	5
6.1. External dimensions of the equipment.....	5
6.2. Installation of equipment.....	7
6.2.1. Before installation, please check whether the packing box contains the following items: (subject to the packing list).....	7
6.2.2, installation environment requirements.....	7
6.2.3, installation method.....	7
6.3 Cable access.....	9
Chapter 7 Operation Instructions.....	9
Chapter 8 Storage and Transportation.....	9
8.1. Storage and transportation of equipment.....	9
Chapter 9 Maintenance and Maintenance of Charging station.....	16
9.1 Maintenance and maintenance.....	16

## Chapter I Product Overview

The arrival of large-scale industrialization of electric vehicle charging station creates a new era of new energy and energy saving. In order to adapt to the development and demand of national new energy electric vehicle charging stations, our company took the lead in the development and development of a series of electric vehicle charging stations supporting new products. This AC charging station is based on international standards and European standards: IEC/EN61851-1-2011 "Conducted charging systems for electric vehicles -- Part 1: General requirements, applicable to AC supply voltage" Part 1: Conducted charging systems for electric vehicles -- Part 1: General requirements, applicable to AC supply voltage

## Chapter II Scope of application

The AC charging station provides AC 50Hz, rated voltage AC power 220V supply for charging electric vehicles with on-board chargers. It is mainly suitable for the following places:

- ◇ Large, medium and small electric vehicle charging stations;
- ◇ Urban residential areas, shopping squares, electric power business places and other public places with electric vehicle parking spaces;
- ◇ Expressway service area, station wharf and other transportation hub areas;
- ◇ Real estate and project construction acceptance needs.

## Chapter III Working environment

- ◇ The ambient air temperature during operation is  $-25^{\circ}\text{C}\sim 50^{\circ}\text{C}$ , 24 h daily average temperature is  $35^{\circ}\text{C}$ ; (too high and too low temperature will affect the life of the product);
- ◇ The average relative humidity  $\leq 90\%$  ( $25^{\circ}\text{C}$ ), no condensation on the surface;
- ◇ Pressure :80 kpa~110 kpa;
- ◇ Installation vertical inclination  $\leq 5\%$ ;

- ◇ Experimental level of Vibration and shock in use ≤ I 级, Inductive strength of an external magnetic field in either direction ≤ 1.55mT;
- ◇ No explosion danger medium in the using place, No harmful gases and conductive media that corrode metals and destroy insulation in surrounding, do not allow the presence of filled water vapor and severe mold;
- ◇ Avoid direct sunlight; When outdoor installation, it is recommended to add sunshade facilities for charging stations to prolong the service life of the equipment; Users have special requirements, can be resolved through consultation with our company.

## Chapter IV Functional characteristics

- ◇ Provide two methods: wall - mounted and column installation ;
- ◇ Adopt AC220V AC input;
- ◇ Sheet metal and part ABS plastic structure used in appearance.

## Chapter V Product Parameters

### Charging station parameters

Product type		KY-AC-7kW
Detailed specifications	Rated power	7kW
structure appearance	Installation method	Wall mounted/column mounted
	Wiring method	Bottom line in, bottom line out
	Equipment size	450*300*120mm
	equipment weight	16Kg
	Cable length	5m
	Input voltage	AC220V±20%
	Input frequency	50±10Hz
	rated power	7kW
	The output voltage	AC220V±20%

Product type		KY-AC-7kW
Electrical indicators	Output current	32A
	Current limit protection value	$\geq 110\%$
	Electrical indicators	$\geq 11$
	Measurement accuracy	1.0 level
	Executive standard	IEC/EN61851-1-2011
Safe design	security function	Charge gun temperature detection, overvoltage protection, undervoltage protection, overload protection, short circuit protection, grounding protection, over temperature protection, low temperature protection, lightning protection, emergency stop protection, leakage protection
	Operating temperature	$-25^{\circ}\text{C}\sim+50^{\circ}\text{C}$
环境指标	Working humidity	5%~95% non-condensing frost
	Working altitude	<2000m
	Protection level	IP54
	cooling method	Natural air cooling
	Noise control	$\leq 40\text{dB}$
	MTBF	30,000 hours

## Chapter 6 Installation Method and Dimension

### Drawing of Equipment

#### 6.1、 External dimensions of the equipment

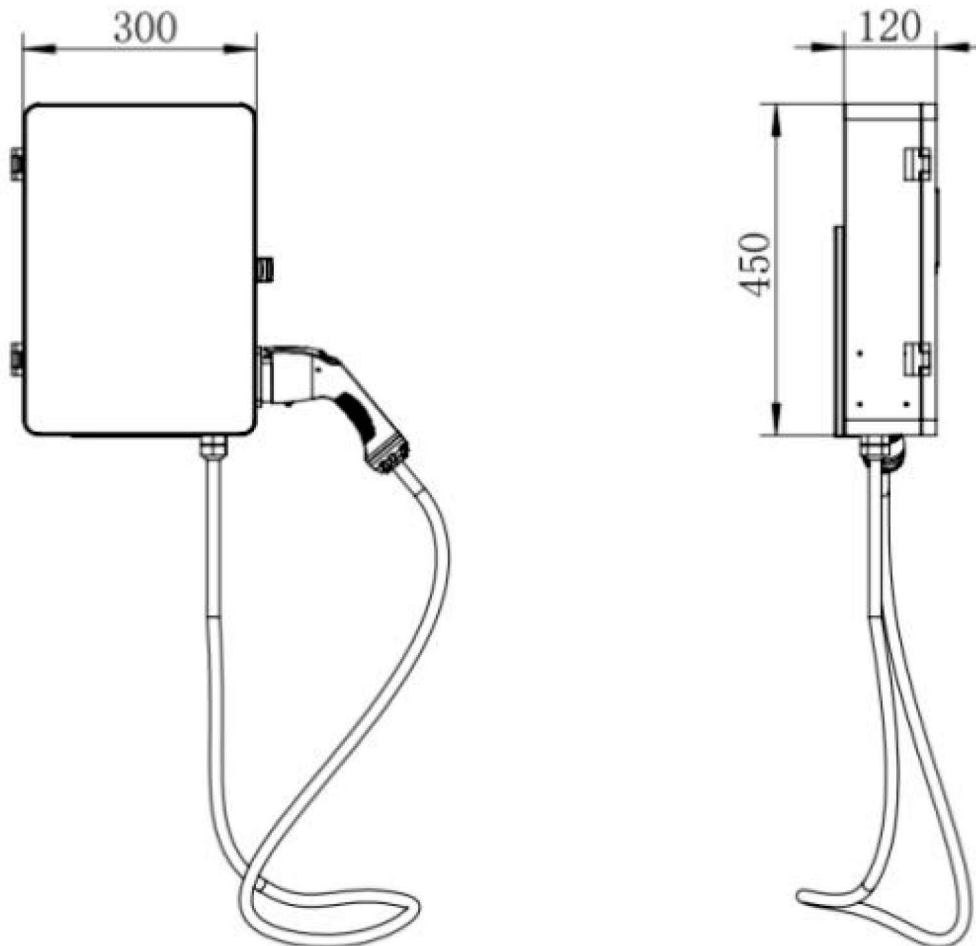


Figure 6-1-1 Dimensions of wall-mounted equipment

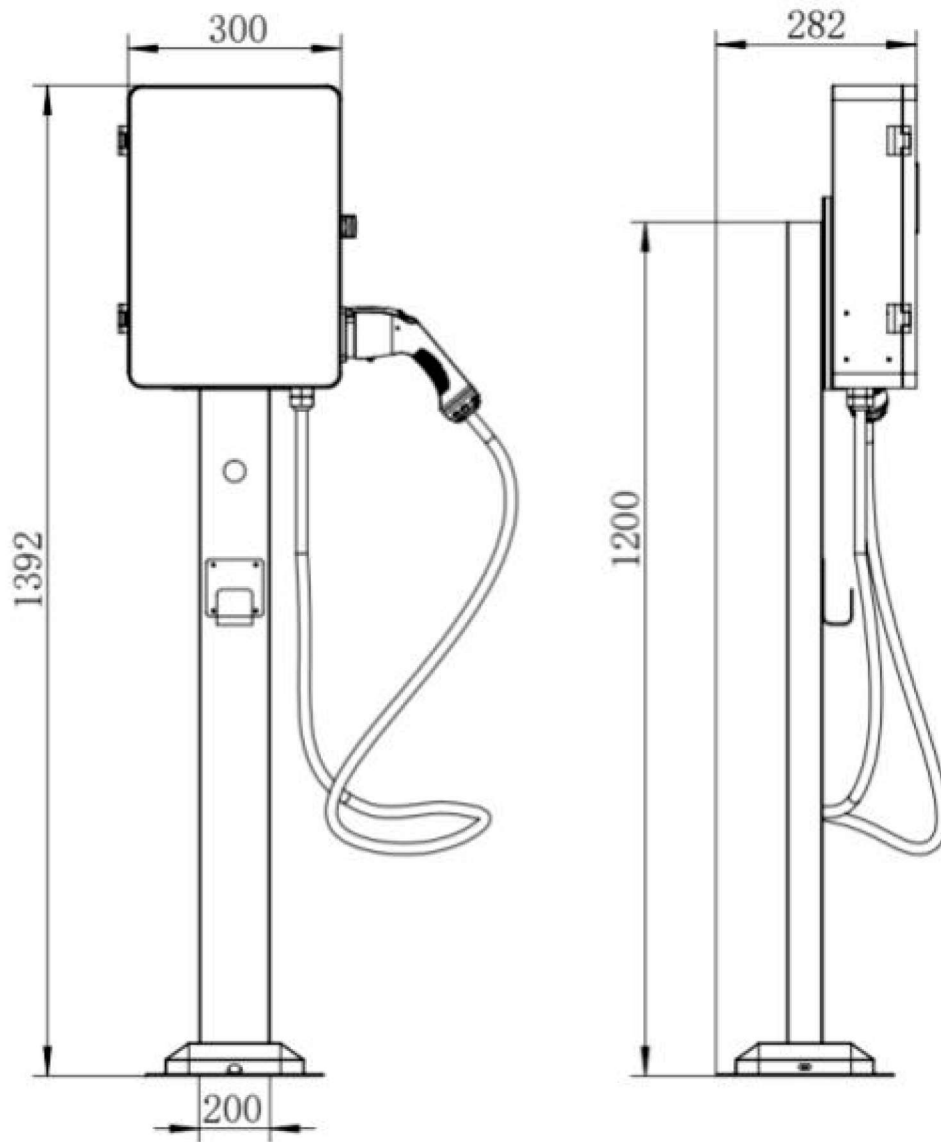


Figure 6-1-2 Overall dimensions of column-type equipment

## 6.2、 Installation of equipment

### 6.2.1、 Before installation, please check whether the packing box contains the following items: (subject to the packing list)

1. One wall-mounted (pillar type) AC charging station
2. One Installation manual
3. One certificate
4. Install four expansion screws
5. Two set keys

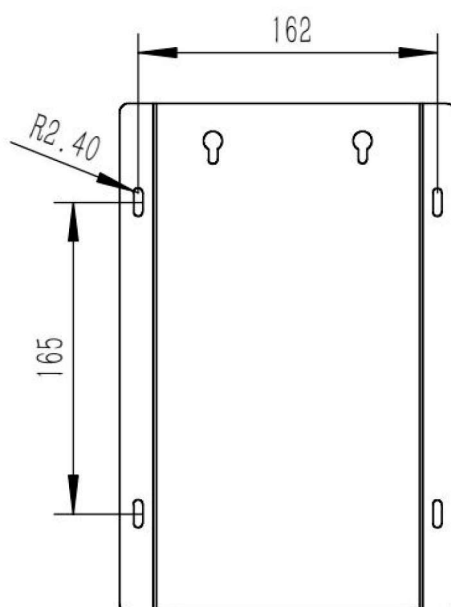
### 6.2.2, installation environment requirements

1. This series of AC charging stations meet the IP54 protection level.
2. Please ensure that the ambient temperature is between  $-25^{\circ}\text{C}$  and  $+50^{\circ}\text{C}$

### 6.2.3, installation method

1. This series of AC charging stations can be installed in wall-mounted or column-mounted installations according to requirements.

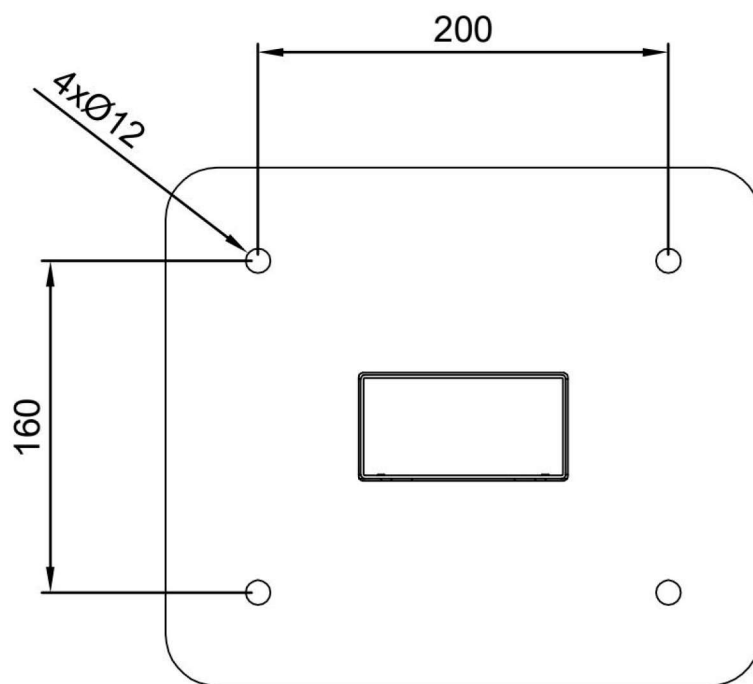
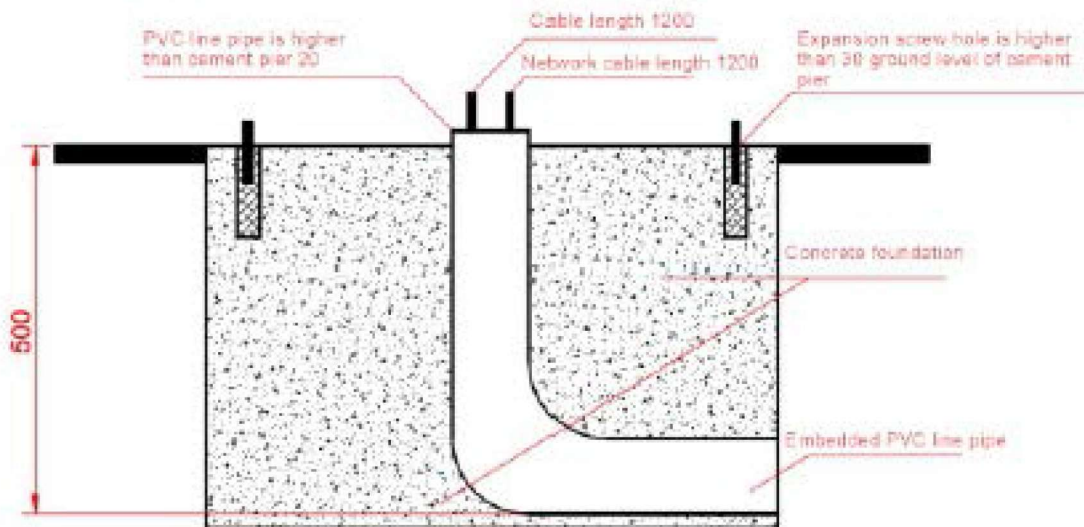
Installation dimensions, as shown in Figure 6-2-1 and Figure 6-2-2:



four set M4 expansion screws for wall-mounted type (holes with a diameter of six)图

Figure 6-2-1 Wall-mounted installation



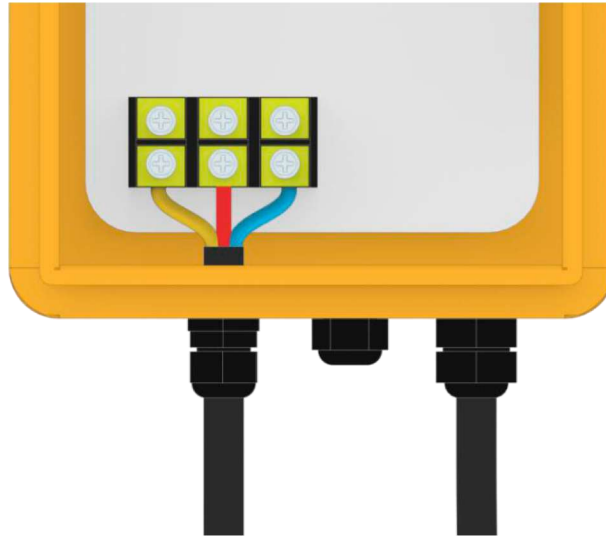


Column type with four set M12 expansion screws (holes with a diameter of 16)

Figure 6-2-2 Column type installation method

## 6.3 Cable access

Connect the AC charging station input cable to the main box wiring block;



## Chapter 7 Operation Instructions

After power on , plug the gun into the plug and charge in the car .

## Chapter 8 Storage and Transportation

### 8.1. Storage and transportation of equipment

Corresponding tightening measures must be taken during transportation to avoid strong vibration and bumps from damaging the outer packaging of the equipment. Check whether there is any damage after arrival. If there is any transportation damage, please negotiate with the transporter and our company. After opening the box, check whether the contents of the box are consistent with the packing list.

The packaged equipment should be stored in a room where the relative humidity is  $\leq 80\%$  and the surrounding air temperature is  $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$ . The storage place should be dry, clean, ventilated, and prevent the intrusion of various harmful gases. It is strictly forbidden to store it in the same place with corrosive items.

**Note: Non-professionals are strictly prohibited from disassembling equipment components.**

## Chapter 9 Maintenance and Maintenance of Charging station

1. Charging stations should be done well for shading and rain prevention measures , outdoor it is recommended to install a canopy.
2. Regularly check whether all the bolts in the charging station are fastened, loose connection lines , weak connection and other phenomena, etc.Check for a short circuit.
3. Pay attention to lightning protection to ensure effective shielding and reliable grounding of charging stations.
4. When in use , the output voltage and current of the charging station should be controlled within the nominal range to ensure that the charging station works at the maximum efficiency state .
5. When the body stops using, stop charging output first, then wrap the cable and put it back in place.

Pay attention: In the process of charging station transportation, the charging station is packed firmly and the loading and unloading direction is marked. It is forbidden to store and transport the charging station upside down. There should be corresponding fastening measures to avoid strong vibration and turbulence to damage the outer packaging of the equipment.

**Note: non-professional personnel are strictly prohibited from removing equipment components.**