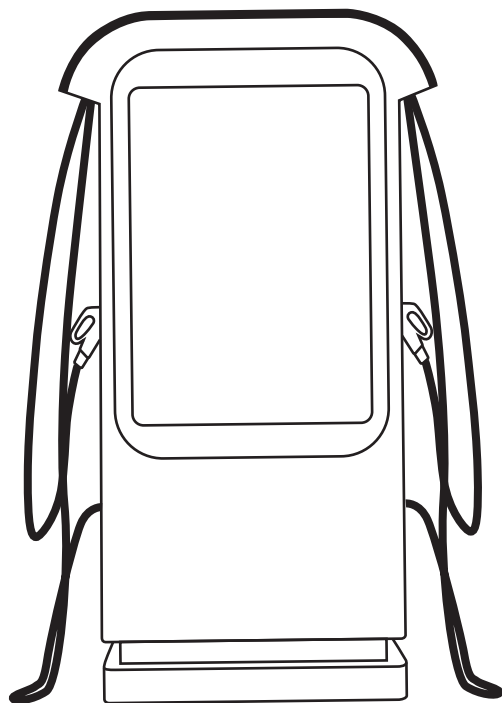

DC EV CHARGER

User's Manual



WAIZIDA



<https://www.regital-newenergy.com>

E-mail: regital@regital-newenergy.com

E-mail: waizida@regital-newenergy.com

Safety Precautions

Before operation, please read the operation instructions and precautions carefully to avoid accidents. The "Attention, Caution, Warning, Danger" items in the product and product manual do not represent all safety items that should be followed, they are only supplements to various operation safety precautions. Must abide by the safety regulations of the relevant industries, when carrying out various operations of our products and equipment, and strictly abide by the relevant equipment precautions and special safety instructions provided by us.

High voltage :



Some components is under high voltage when the power supply system is running, and direct contact or indirect contact with these components through wet objects will bring fatal danger.

Electrical Safety

The installation of AC device must comply with the safety regulations of related industries, and installer who installs AC device must be qualified for high voltage and AC operations. It is strictly forbidden to wear conductive objects such as watches, bracelets, bracelets, and rings on the wrist during operation. If you find water or humidity in the cabinet, please turn off the power immediately. When operating in a humid environment, water should be strictly prevented from entering the device. On the switches and buttons that are not allowed to be operated during installation process, must hang a symbol for prohibition.



Construction operations on high-voltage lines may cause fire or electric shock accidents. AC cables must be erected and wired up according to the local regulations and specifications. Only personnel qualified for high-voltage and AC operations can perform various high-voltage operations.

Tools :



When performing various operations on high voltage and alternating current, professional tools must be applied.

Thunder storm :



It is strictly forbidden to operate under high-voltage and alternating current in thunderstorm weather.

When thunderstorms, strong electromagnetic fields are generated in the atmosphere. In order to avoid lightning damage to the equipment, it is necessary to do a good grounding of the equipment timely.

Static electricity :



Static electricity generated by human body will damage the electrostatic sensitive components on the circuit board, such as large-scale integrated circuits (IC). Before touching the equipment, holding plug-in boards, circuit boards, IC chips, and others, operators must wear an anti-static wrist, and ground the other end to prevent static electricity from damaging sensitive components.

Short-circuit :



Strictly forbidden to short-circuit the positive and negative poles of the DC distribution of the power supply system, or short-circuit the non-grounded poles to the ground during running. The power supply equipment is a constant voltage DC power supply equipment, and a short circuit will bring equipment burning and personal hazards.

Must strictly check the polarity of cables and interface terminals when working with DC. Operating space of DC power distribution is compact, should pay attention to selecting the space before any operation. Must use insulated tools when operate. Must pay attention to keeping hands, wrists, and arms in a tense state when operating with electricity, so that to prevent accidents caused by too much movement of the tools slip or human body.

Others

Sharp tip of object :



Should wear protective gloves to prevent cuts from sharp objects when carrying the equipment with hands.

Cables of Power supply :



Please verify the cable labels are correct or not before connecting power supply.

Signal cable :



150mm Signal cables should be bundled separately from power cables and a spacing is 150mm at least.



IEC 61851-1



UKCA



CE



MACHINE AND PRODUCT TEST



ISO9001



ENERGY STAR



ETL



FCC



ECM

①

PRODUCT OVERVIEW

High-power power supply module platform with core safety level brings higher safety and reliability Intelligent charging process control, perfect charging process monitoring and protection, make all fool-like operation. Multiple charging type for option: Timing charging, Electricity volume charging, Amount charging and automatic charging; Real-time display the charged amount, charging time, current unit price, charging price and other details, and operating status; Can reserve the RS-485 networking communication interface and provide optional GPRS networking mode; Module hot-plug and unplug technology makes maintenance more convenient; Temperature range of working place -40+70°C.

The charging device works with the OCPP 1.6JSON open protocol to communicate with the background server, so that realize functions such as booking and online payment through the mobile APP.

Provide customers with a variety of communication solutions such as Ethernet, WIFI, 4G, wireless, etc., and connect devices to the charging network easily.

②

PROTECTION FUNCTION

Electrical isolation for input and output On Board Charger

For output there is a device to prevent the battery pack from outputting filter capacitor to On Board Charger.

The withstand voltage level, insulation level, and EMC of the charger follow the international standards "IEC/EN 61851-1/-23", "IEC/EN 61851-21-2", "EN 301 489-1/3/17", "EN 300 330", "EN 300 328 " EN 301 511" "EN 301 908-1/2/13" "EN IEC 62311" relevant regulations; This product totally complies with the construction requirements of the electric vehicle charging station of the National Grid Corporation of China.

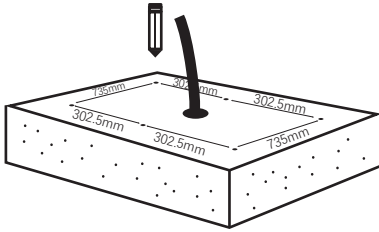
③

RANGE OF APPLICATION

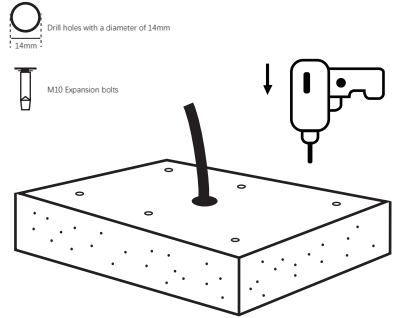
The integrated DC charging pile is applied for urban special charging stations (buses, taxis, official vehicles, sanitation vehicles, logistics vehicles, etc.) , urban public charging stations (private cars, commuter vehicles, buses) , urban residential areas, shopping malls, electric power lot and other various parking lots in business places; Intercity expressway charging stations and other occasions requires DC fast charging, especially suitable for rapid deployment under limited space.

Model D8 EV Charger Data Sheet

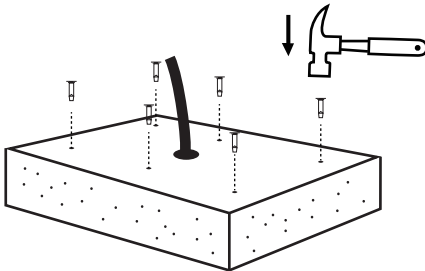
FLOOR MOUNTED DC CHARGER		AMERICAN STANDARD				
		60KW	90KW	120KW	180KW	240KW
PARAMETER	Product Name	DC 60-240KW Charger				
	Item No.	EU-DCPD22-60-D8	EU-DCPD22-90-D8	EU-DCPD22-120-D8	EU-DCPD22-180-D8	EU-DCPD22-240-D8
INPUT	Input Voltage	480V±20%				
	Frequency	50Hz±10%				
	Power Factor	≥0.99				
OUTPUT	Range of Output Current	MAX 250A				
	Output Voltage	200V-1000V				
INTERFACE	Plug Type	CCS1/ CCS2/ GBT/ TESLA				
	LED Indicator Lamp	Support				
	Display Control Screen	7" LCD Touch Screen				
	LCD Advertising Screen	43 Inch LCD Advertising Screen Brightness: 2000cd/m ²				
	Language	Chinese, English, French, German, Spanish, Russian, etc.				
	NO. of Charging Gun	Single / Dual				
	Charging Mode	Automatic Charging / Electricity Volume Charging / Amount Charging / Timing Charging				
COMMUNICATION	Payment	APP / RFID / POS (Optional)				
	Network Connection	4G/ Ethernet				
	Communication Protocols	OCPP1.6J or OCPP2.0				
ELECTRICAL PARAMETERS	Protection Limit	≥110%				
	Stabilizing Voltage Accuracy	≤±0.5%				
	Stabilizing Current Accuracy	≤±1%				
	Ripple Factor	≤±1%				
	Efficiency	≥95%				
	Power factor	≥0.99 (Over 50% Load)				
	THD	≤5% (Over 50% Load)				
ENVIRONMENTAL PARAMETERS	Working Temperature	-20℃~+55℃				
	Working Humidity	5%-95% No Frosting				
	IP Protection	IP54				
	Acoustic Noise	<60dB				
	Cooling Method	Forced Air-Cooling				
	MTBF	100,000 hours				
SAFETY	Safety Protection	Temperature Detection of Charging Gun / Over-Voltage Protection / Under Voltage Protection / Over Load Protection/ Short Circuit Protection / Grounding Protection / Over Temperature Protection / Low Temperature Protection / Insulation Detection Protection / Polarity Reverse Protection / Lightning Protection / Emergency Stop Protection /Leakage Protection				
	Safety Standard	IEC/EN 61851-1,IEC/EN 61851-21-2,EN 301 489-1/3/17,EN 301 908-1/2/13,UL 2202,UL2231,UL2251				
	Certification	In Processing				
	LCD Advertising Screen Warranty	One Year				
	EV Charger Warranty	One Year				
MECHANICAL	Dimension	2.3*1.13*0.91m				
	Cable Length	5m (Customization Acceptable)				



1. Measuring the distance of the hole

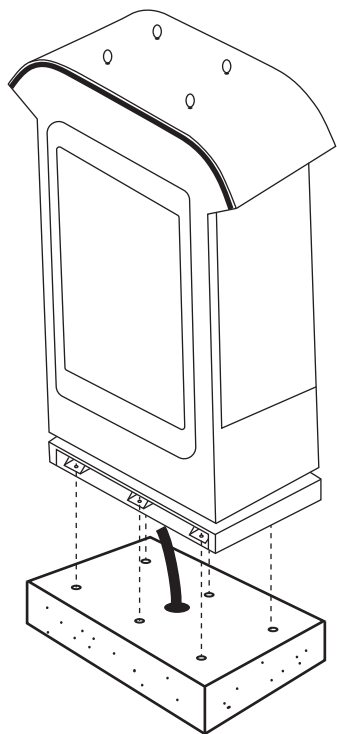


2. Mounting holes. According to the base installation size, punch 6 mounting holes on the base with an impact drill

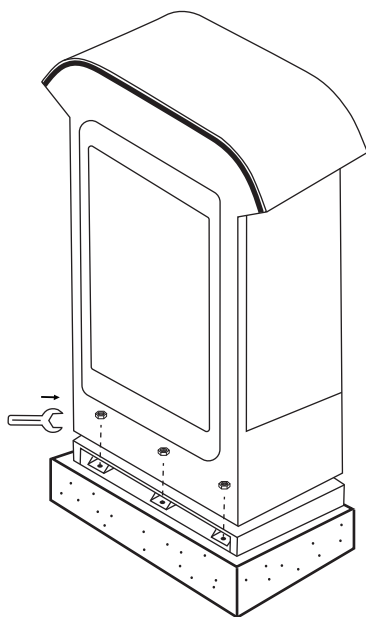


3. Drive in expansion bolts

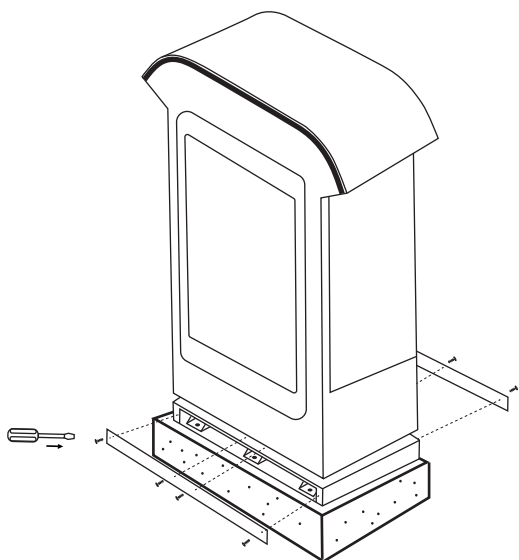
* Remark: The parameter is for reference only, subject to the material object shall prevail.



4. Lifting eye bolt



5. Tighten the nut



6. Install the base side cover

* Remark: The parameter is for reference only, subject to the material object shall prevail.

Installation

1. Request for installation environment

- ① This series of DC Charging Pile is outdoor type, meets IP 54 protection level
- ② Please make sure the environment temperature is -25°C to 50°C

2. Installation method

This series of DC charger can be installed as floor-standing type according to actual demand

3. Description for installation wiring

Connect the buried 3-phase 4-wire AC cable to the input of the charger according to proper color and phase sequence.

The grounding cable should be connected to the ground rod of charger. The wiring diagram is shown in the figure.

PLEASE NOTE: For safety, Charging device must be firmly grounded. Connect the grounding rod of charger to the potential bonding rod at the installation site. The grounding cable should not be less than 16mm^2 .

The grounding resistance should be less than 4Ω .

Annotation:

1. The foundation must be compacted. Please do reinforce foundation if on loose and wet field soil. The foundation must be at the highest point in the area to avoid flooding.
2. Base of foundation should be made of reinforced concrete, which requires the minimum allowable load-bearing pressure of the base to be $1000\text{kg}/\text{m}^2$.
3. Construct grounding bus and electrodes according to the grounding adjustment of the substation to. The grounding resistance should be less than 4Ω , it is recommended to use 50×4 flat galvanized steel.
4. For cable guide, recommend to use PVG with a diameter of 150mm . The direction should be confirmed according to the site conditions, and the quantity should be confirmed according to the number of high-voltage/low-voltage cables (redundant design is adopted).
5. Please to level the foundation of ground with the assisting of level rule.
6. The minimum height of the foundation is 150mm from the ground, and the vertical inclination should be less than 5% .

Attention :

- ① Wiring operation for professionals only. Connect the AC input wires according to proper phase sequence followed the marks on the wiring board.
- ② The connection between PE terminal and grounding must be firm and reliable!
- ③ When no operation or working on site, please turn off the upstream breaker of the switchboard and the inner breaker of charging device.
- ④ Please do not disassemble the charging unit unless the authorization

Annex: Code of Fault :

NO.	Fault Description
1	Emergency stop button has been pressed
2	Fault of RFID Card communication
3	Fault of lightning
4	Fault of power supply module
5	Fault of over temperature
6	DC output over voltage
7	Fault of meter communication
8	Fault DC output over current
9	Time out for waiting BMS communication
10	Time out of insulation detection
11	Fault of insulation detection
12	Stuck Fault for DC contactor
13	Stuck Fault for DC contactor
14	Fault of Battery Voltage Reverse
15	Fault of Over temperature for plug connection
16	Fault of Plug cable disconnect
17	Stuck Fault of AC contactor
18	AC input over voltage
19	AC input under voltage
20	Fault OF BMS communication

During delivery, the main body of device should be packed firmly and intactly into a solid wooden carton, and must mark the direction of loading and unloading clearly. Reversing the device direction is forbidden. Corresponding fastening measures should be taken during transportation to avoid strong vibration and bumps from damaging the outer packaging of the equipment. After the arrival, you should check if there is any damage. If there is any damage during transportation, you should negotiate with the transporter and supplier timely. After unpacking, immediately check whether the items in the box are consistent with the packing list.

Packaged equipment should be stored in a room with a relative humidity of $\leq 80\%$ and an ambient air temperature from -10°C to $+40^{\circ}\text{C}$. The storage site should be dry, clean and ventilated, and able to prevent the intrusion of various harmful gases. It is strictly forbidden to store the corrosive goods together with charging device in the same place.

Tips: Disassemble the Device or componens by non-professional are strictly forbbiden

Maintenance

- Device body should be fixed with anchor bolts to prevent the body from slanting and shaking due to external and human factors.
- Recommend to make sunshade and rainproof measures for charger, and installing a rain shelter outdoors is suggested.
- Regularly check if all the bolts in the charger are fastened, if the connecting wires are loose, or if the connection is not firm and others.
- Check if there is short circuit.
- Check if the Emergency stop button is workable
- Pay attention to lightning, and make sure the effective lightning protection and reliable grounding
- When running device, try to control the output voltage and current of charger within the nominal range to guarantee that charger works at maximum efficiency.
- When device stops running, the charging output should be stopped first, then cable should be wrapped up and put back to its original position.

Attention :

During delivery, the main body of device should be packed firmly and must mark the direction of loading and unloading clearly. Reversing the device direction to deliver is strictly forbidden; There must be related fastening measures in order to avoid the damage for outer package caused by fiercely vibration and bumps

⑧

WARRANTY CARD

- ① Warranty duration is 24 months
- ② During warranty period, any faults (judged by official employees of us) that occur under normal use according to the instructions will be repaired free of charge.
- ③ Charging equipment can guaranteed as the above relevant warranty terms, except for the following problems:
Can't provide this warranty and valid purchase proof or receipt
 - 1) Can't provide this warranty and valid purchase proof or receipt
 - 2) Warranty period is expired
 - 3) There is no warranty card and valid invoice, or the content on the warranty card is inconsistent with the actual identification of the repaired product or has been modified;
 - 4) Damage caused by failure to operate, maintain, or store in accordance with the requirements of the instruction manual
 - 5) Entering of foreigner object, and it causes damage or malfunction
 - 6) Fault or damage caused by product not produced by our company.
 - 7) Damage caused due to disassembling by repairer who is not able to undertake the guaranty
 - 8) Damage caused by force majeure (such as lightning, over-voltage, earth quake, Fire hazard, Flood and other natural disaster)
 - 9) Fault and damage caused by other unavoidable external factors;
 - 10) Damage caused by misuse to make the water or other solutions enter into device;
 - 11) Damage caused by power supply or voltage not appointed
- ④ We only make these above guarantees, and no other express or implied guarantees (including the implied guarantees of marketability, rationality and adaptability to a specific application, etc.) are made. No matter in contract or civil negligence or any other aspect, we shall not take the responsibility for any special, accidental or indirect injurer.
- ⑤ This warranty is valid in The Public Of China only.