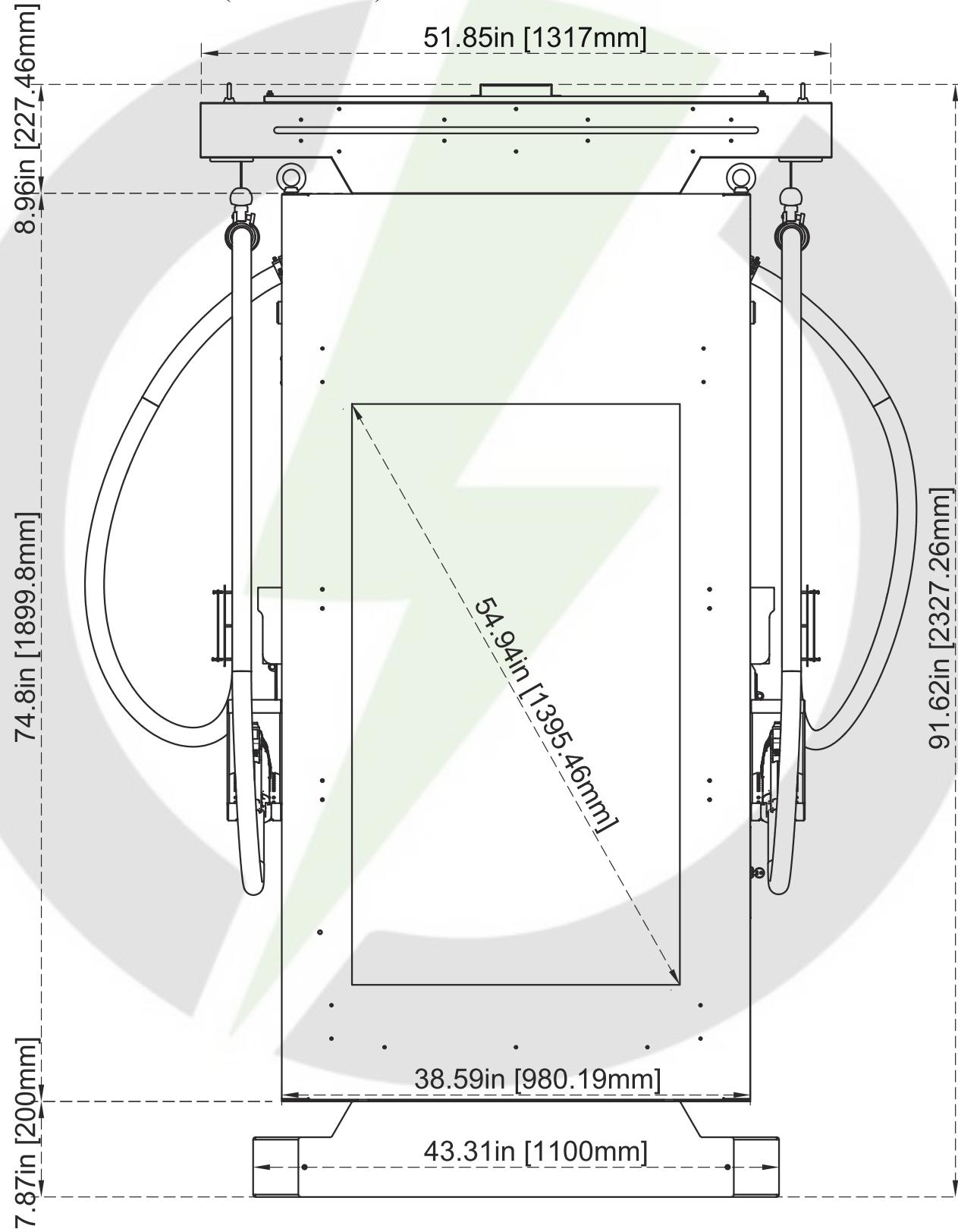


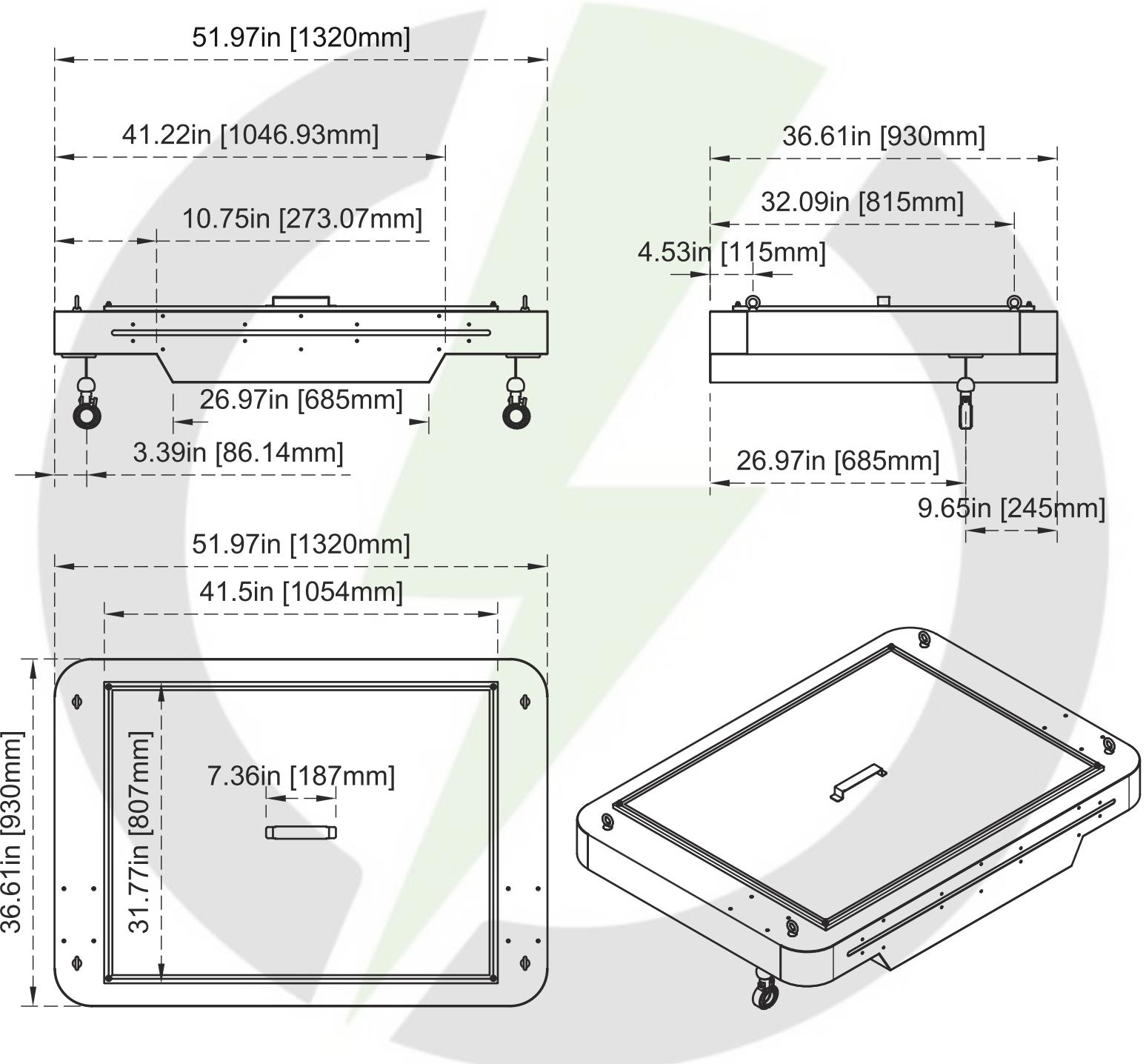


## 8. Dimensions

### 8.1 Vision 360 (Assembled)



## 8.4 Vision 360 (Cable Management)



## 9. Specifications

Model		Specifications				
AC INPUT	Voltage Rating	3Φ480Vac (+10%, -15%)				
	Max. Input Current	90KW	120KW	150KW	180KW	240KW
		117A	155A	194A	232A	310A
	Electrical Distribution	3P+ N+ PE (Wye configuration)				
	Power Grid System	TN-S, IT				
	Frequency	60Hz				
DC OUTPUT	Power Factor	> 0.99				
	Efficiency	> 95%, at optimize V/I point				
	Output Voltage Range	200Vdc ~ 1000Vdc				
	Maximum Output Current	200A*2				
	Maximum Output Power	DC90~240kW				
	Simultaneously output mode	0%, 50%, 100% *Each connector will get 50% output power when plugged in simultaneously; And one connector will get 100% when another connector finishes the charging session or only this connector is plugged in.				
Communication	Voltage Accuracy	±0.5%				
	Current Accuracy	±1%				
	External	Ethernet, Wi-Fi, and 4G				
	Internal	CAN / RS485 / RS232				
	Load Management	Via OCPP				
	Input Protection	OVP, OCP, OPP, UVP, SPD				
User Interface & Control	Output Protection	OCP, OVP, LVP, OTP, IMD				
	Internal Protection	OTP, DC Contactor Detection, Fuse Detection				
	Electrical Isolation	Isolation between Input and Output				
	Standby Power	< 100W				
	Display	7-inch touchscreen LCD (1024 x 600)				
	Button	Emergency shut off				
User Authentication			App, WebApp, ISO 15118, RFID, Credit Card (Optional)			
	Backend Support		OCPP 1.6 JSON (Upgradeable to 2.1)			

Advertisement	Display	55-inch LCD Screen
	Resolution	TFT – LCD Panel (1080 x 1920 pixels)
	Backend	EVBOLT Cloud
Environmental Conditions	Operation Temperature	-22°F to 122°F (-30°C to 50°C)
	Storage Temperature	-22°F to 158°F (-30°C to 70°C)
	Relative Humidity	5%~95% RH, non-condensing
	Altitude	≤ 6560 ft (2000m)
Regulations	Safety	UL2202, UL2231
	EMS	UL2231
	Hardware Assessment	UL1998
	Function Safety	UL991 Function Safety
	IK And Waterproof	UL50E
	Charging Interface	DIN 70121/ISO15118
	Certification	ETL, Energy Star, FCC
Mechanical Specifications	Dimensions (WxDxH)	52.0 x 36.6 x 91.6 inches (1320 x 930 x 2327 mm)
	Weight (typ.)	<19971bs. (906kg), includes two charging connectors
	DC Charging Connector	CCS1
	Cooling	Fan cooling
	Installation Mode	Floor-type
	Ingression Protection	TYPE 3R
	Anti-vandalism	IK10, excludes LCD & RFID cover

## 10. Status Description



### STANDBY

Green light stays steady in standby mode



### CHARGING

Flashing Green Light



### FAULT

Steady red light when fault occurs

## 11. Installation Instructions

### 11.1 Contractor Safety Guide

- A safe work environment for everyone - participants, installation and demolition crews, contractors and subcontractors
- Ultimately, it is the responsibility of contractors to ensure the safety and safe work practices of their employees and subcontractors who may be working at the site on their behalf
- This guide provides a simple reference guide with basic rules for implementation. This guide does not outline every single safety standard: it is designed to be a supplement to participants, contractors and subcontractors
- Contractors, subcontractors and employees should cooperate with their employers and other persons in complying with safety regulations and instructions
- In particular, employees should:
  - Obtain the qualified authorization of the responsible unit in the construction area
  - Work safely
  - Do not do anything to endanger themselves or other persons
  - Use personal protective equipment as required and take reasonable care of it when it is not in use
  - Report unsafe activities immediately to supervisors or the responsible person in control of the workplace, and
  - Report all accidents and dangerous occurrences to the supervisor immediately

## 1- Reference standards



Adhere to the following codes:

- NFPA-70E -2021 Sec 110.3 (Electrical Safety in the Workplace)
- NFPA-70E -2021 Sec 130.4 (Shock Risk Assessment)
- NFPA-70E -2021 Sec 130.5 (Arc Flash Risk Assessment)

## 2- Requirements for workplace conditions



DO NOT  
ENTER

- Set up suitable fencing to isolate the construction area from outside
- Close and secure all entrances when the site is unattended
- Hang warning notices nearby which show the following information: warning icon and phone number of people in charge
- Install sufficient lighting fixtures

## 3- Cleaning up



- Keep work areas (including accessways) free from debris and obstructions
- Keep ground surfaces tidy and flat, to avoid people tripping or being hurt by tools or other objects
- Stack and store equipment and materials in a tidy and stable manner
- Regularly clean up and dispose of waste
- Remove all surplus materials and equipment after completion of work

## 4- Fire hazards

- Beware of flammable materials and goods. Keep them away from work areas.

## 5- Protection against high temperatures on the worksite



- Erect a sunshade or shed to shelter workers from the heat and sun
- Set up cooling equipment, such as exhaust fans
- Make water dispensers available
- Provide suitable protective clothing such as hat, sunglasses and long sleeves to protect workers from heat stroke and UV rays

## 6- Inclement weather



- Secure all scaffoldings, temporary structures, equipment, and loose materials
- Check and implement SOP to ensure disconnection of gas supplies, electrical circuits and equipment
- Inspect worksites to ensure protection against ingress of water or dust
- Inspect the drainage system for blockages and remove if found
- Stop all outdoor works except for emergency works

## 7- Ladders



- Only use ladders that meet local safety regulations
- When working at height, it is recommended to use platforms instead of ladders
- If using a platform is not practicable, a supervisor should assess the potential risk and provide safety protection equipment for workers
- use non-conductive ladders made of glass-fiber or reinforced plastic when carrying out electrical work
- Assign assistants to provide support when working on ladders
- Check all ladders for broken rungs or other defects before use and periodically
- Fully open stepladders when in use
- Do not overreach when working on a ladder
- Beware of overload restrictions

Country	Standards
USA	ANSI A 14.1, ANSI A 14.2, ANSI A 14.5
Canada	CSA Z11 M81

## 8- Working at height



- Avoid working at height by using alternative tools and methods as far as practicable
- It is strongly recommended to build suitable scaffolding or work platforms
- Provide fall arrest systems for workers if it is impracticable to use working platforms
- Secure all materials and tools to prevent them falling from height

## 9- Lifting operations



- Have lifting gear and apparatus regularly inspected and tested by qualified persons
- Isolate and cordon off lifting areas to keep out non-construction personnel
- Ensure that lifting routes do not cross buildings or people, and avoid collision with objects
- Do not exceed safe working load limits

## 10- For on-site workers



- Plan all work
- Turn off power (work with live parts de-energized whenever possible)
- LOTO (Lock Out, Tag Out)
- Live electrical work permit (input terminals with HV after door open)
- Use personal protective equipment (PPE)
- Safe workplace conditions and space
- Adhere to other occupational health, safety and security codes, such as those published by OSHA

## 11.2 Before Installation

- Read all the instructions before using and installing this product.
- Do not use this product if power cable or charging cable have any damage.
- Do not use this product if the enclosure or charging connector are broken or open or if there is damage.
- Do not put any tool, material, finger or other body part into the charging connector or EV connector.
- Do not twist, swing, bend, drop or crush the charging cable. Never drive over it with a vehicle.



Warning: The product should be installed only by a licensed contractor and/or licensed technician in accordance with all building codes, electrical codes and safety standards.



Warning: The product should be inspected by a qualified installer prior to initial use. Under no circumstances will compliance with the information in this manual relieve user of his /her responsibilities to comply with all applicable codes and safety standards.

- Power feed must be 3 Phase Wye configuration with TN(-S)/ TT grounding systems.
- In the installation of TN(-S) system: the neutral (N) and the PE of the power distribution are directly connected to the earth. The PE of the charger equipment is directly connected to the PE of power distribution and separate conductor for PE and neutral (N).
- In the installation of TT system: the neutral (N) and the PE of the power distribution are directly connected to the earth. The PE of the charger equipment is isolated to the PE of power distribution to the earth.
- The capacity of power supply should be higher than 194kVA in order to function correctly.
- The product should be installed in free air area and keep at least 30cm (12 inches) clearance distance to all air vent of the product.
- Recommend to keep not less than 107cm (42 in.) clearance distance from all around the product following NEC table 110.26 condition 2, 151-600V.



## NOTICE

It is recommended to conduct Wi-Fi and 4G signal strength while charger installation. The RSSI (Received Signal Strength Indication) value is considered as good as higher than -65dBm. Poor connection quality might interrupt charging process or data transaction.

### 11.3 Grounding and Safety Requirement

- The product must be connected to a grounded, metal, permanent wiring system. Connections shall comply with all applicable electrical codes. Recommend the ground resistance be less than  $10\Omega$ .
- Ensure no power is connected at all times when installing, servicing, or maintaining the charger.
- Use appropriate protection when connecting to main power distribution network.
- Use appropriate tools for each task.



**CAUTION:** The disconnect switch for each ungrounded conductor of AC input shall be provided by installation contractor or technician in accordance with the National Electric Code, ANSI/NFPA 70.



**CAUTION:** A cord extension set or second cable assembly shall not be used in addition to the cable assembly for connection of the EV to the EVSE.

### 11.3.1 Service Wiring

#### Ground Connection

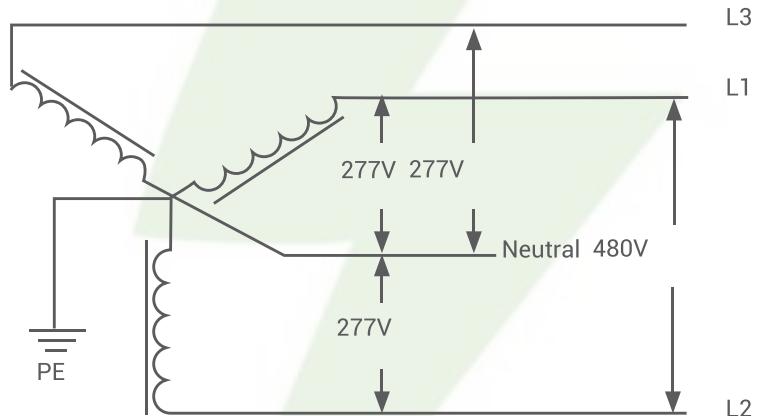
Always connect the Neutral at the service to Earth Ground. If ground is not provided by the electrical service then a grounding stake must be installed nearby. The grounding stake must be connected to the ground bar in the main breaker panel and Neutral connected to Ground at that point.

#### 480Vac (Line to Line) Three-Phase

##### CAUTION!



This is feed from Wye-connection power grid, the Standalone DC Fast Charger can connect to L1, L2 or L3, and Neutral. Earth ground must be connected to neutral at only one point, usually at the breaker panel.



480V Three-Phase Wiring Connection

##### DANGERS



Be Aware of High Voltage!

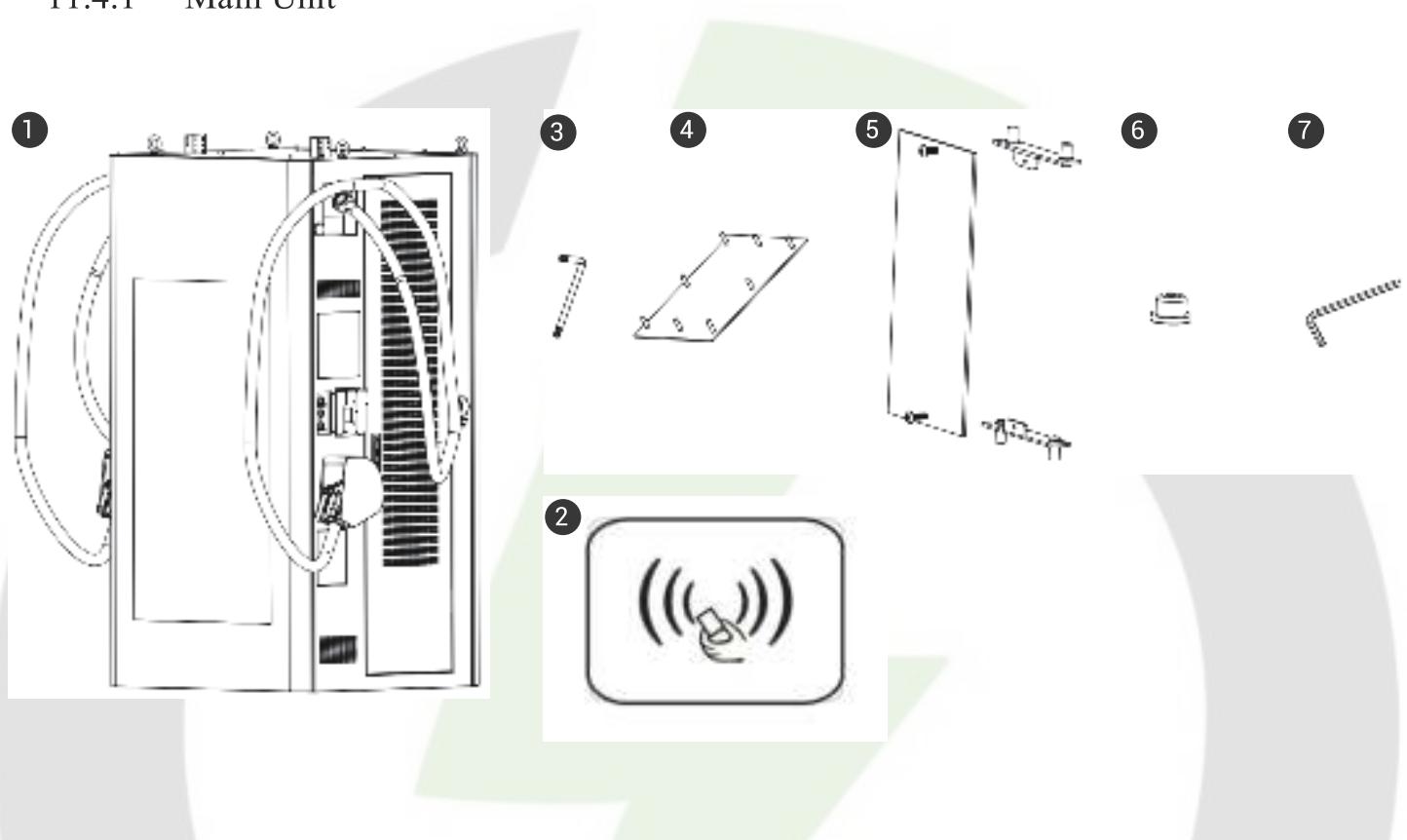
##### WARNING!



Earth Connection is Essential!

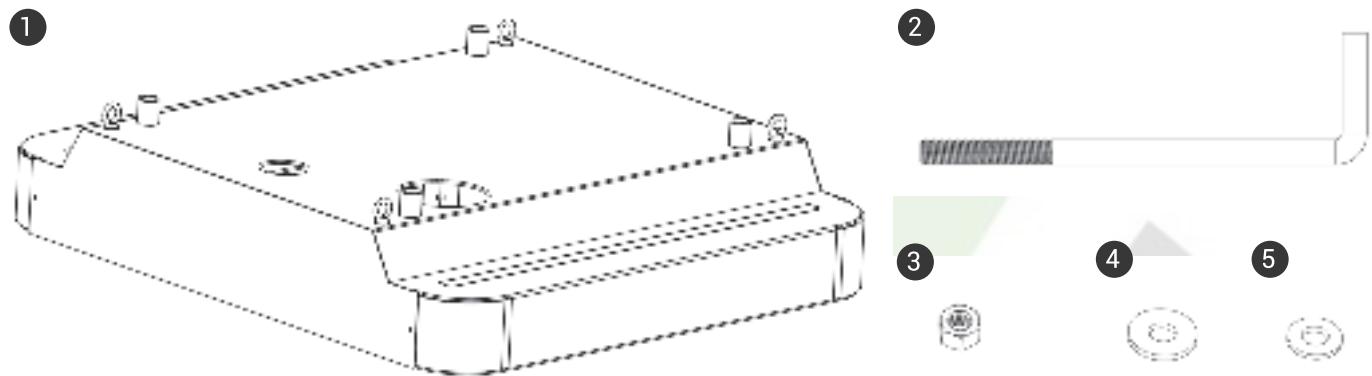
## 11.4 Packing List

### 11.4.1 Main Unit



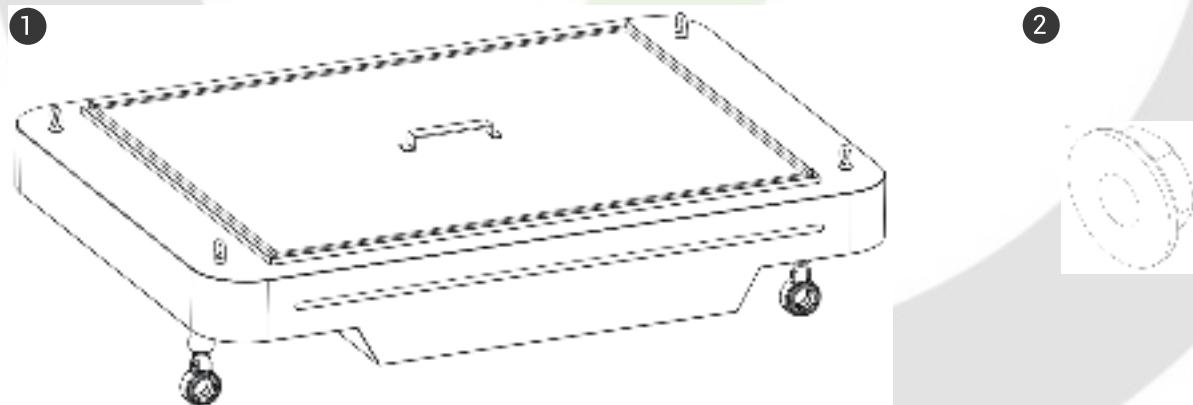
No.	Product Name	Qty	Notes
1	DC Charger (With Charging Cables)	1	
2	RFID card (RFID Version Only)	2	
3	M3 Anti-theft Screw Wrench	1	
4	POS Cover Plate	2	
5	Electric CM button cover	2	Including M3 cross round head machine Teeth screws (8 pcs). Round head plum anti-theft screw belt raised (4 pcs)
6	Rubber Plug	4	Replace M16 lifting hooks from the top with these rubber plugs
7	Opposite side 3mm HEX Wrench	2	The cable puller clamp uses a fixed charging gun cable

#### 11.4.2 Base



No.	Product Name	Qty	Notes
1	Base	1	
2	M16 foundation screws	4	
3	M16 Hexagon nut	4	
4	M16 stainless steel gasket	4	
5	M16 silicone gasket	4	

#### 11.4.3 Cable Management



No.	Product Name	Qty	Notes
1	Cable Management	1	
2	M8 Flange nut	6	

## 11.5 Unpack the charger

- The product is direct current (DC) charger and the packing design passed the packaging simulation test. If the packaging damage caused by overturning, falling or external impact during transportation, it may cause the product damage or defects. If there is any serious damage to the packaging when receiving the goods, please notify the supplier about your findings.
- The product is delivered by transport company to warehouse or specified location where it will be handed over. Transporting the charger to its final location (last mile service) is not standard included in the order.
- NOTICE: The delivery truck unloads the pallet carrying the charger. The movement of the charger to its final location is the responsibility of the customer / contractor.

If the packaging or charger is damaged

- Do not refuse the shipment / receipt.
- Make a notation on the delivery receipt and inspect cabinet for damage.
- If damage is discovered, leave cabinet in original package and request immediate inspection from carrier within 3 days of delivery.
- Contact the supplier by mail or phone to address your findings.

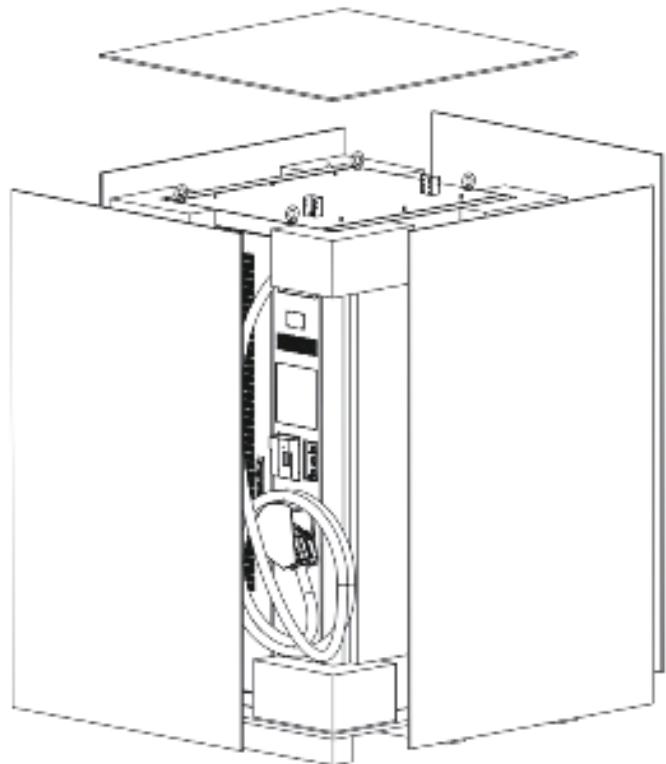
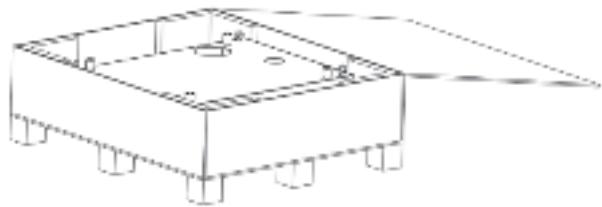
**WARNING!**

A black triangle warning icon with a white exclamation mark in the center.

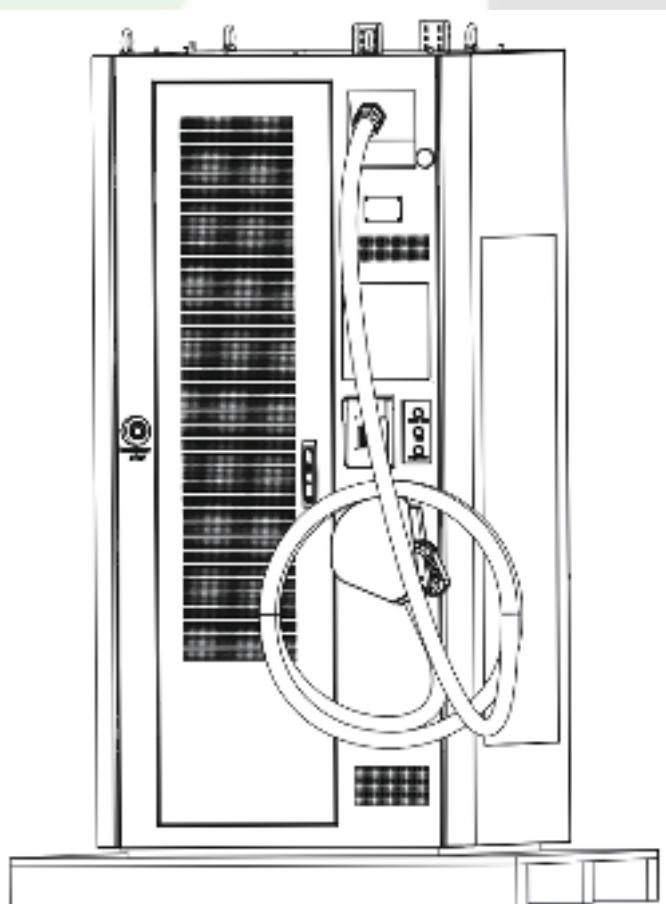
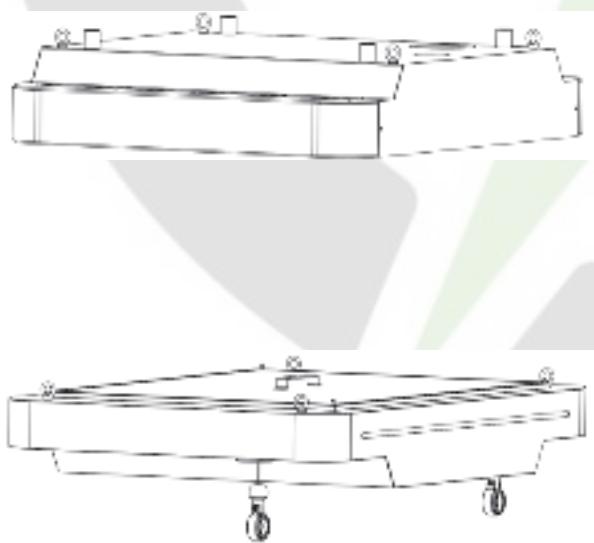
Charger weight might be 1997 lbs. (906 kg). Charger with package might be 2293 lbs. (1040 kg).  
Becareful during unpack process.

**STEP 1**

Remove the surrounding boards and remove the top

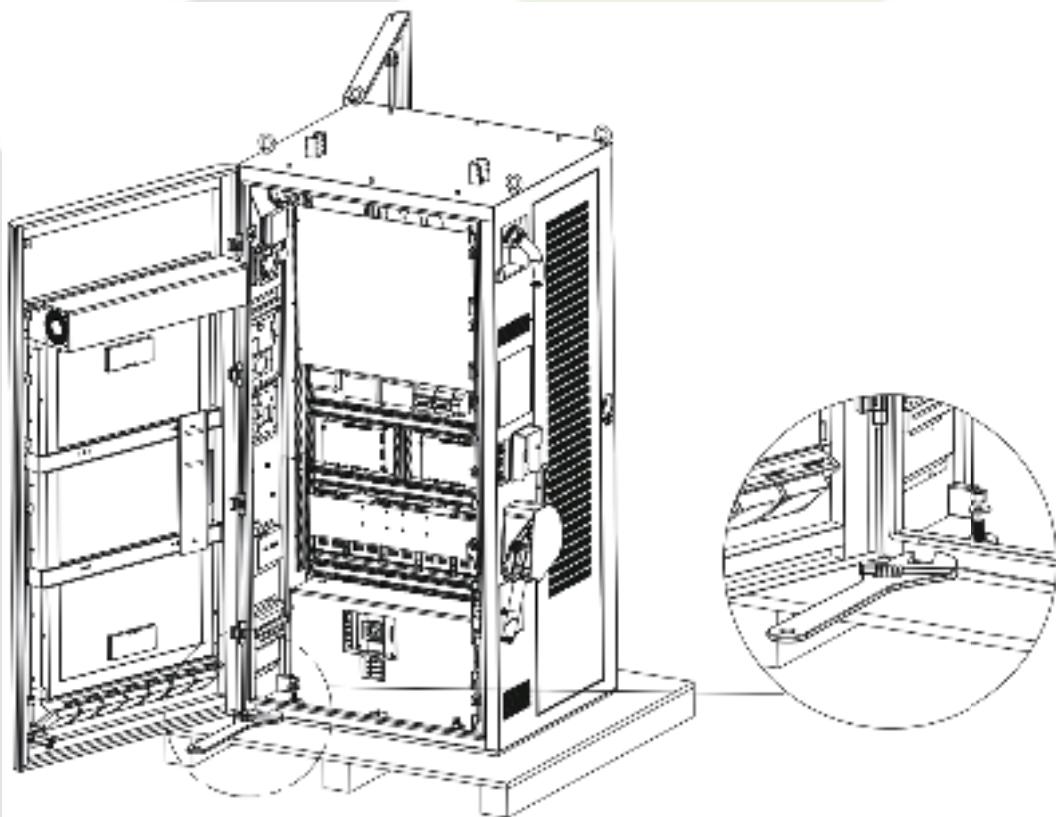
**STEP 2**

Remove the carton and packing cushion and film

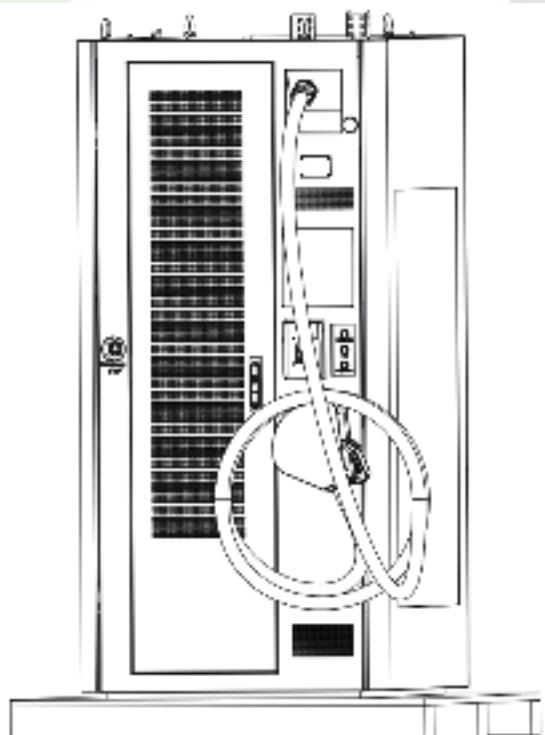


**STEP 3**

Unlock and open both the front and rear doors (the front door swings outward from the door lock handle, while the remaining doors open towards the door hinge from the direction of the door lock handle). Proceed to extract the four M16 nuts and gaskets located at the inner corners of the cabinet.

**STEP 4**

Prepare the units to lift off the pallet using a crane through the four M16 eye bolts at the top of each cabinet.



## 11.6 Recommended Tools for Installation and Inspection

### 11.6.1 Recommended Tools for Installation

Type	Description	
Philips Screwdriver	No. 2 and 3	
Shifting Wrench	10 inches	
Socket Screwdriver	No. 14, and 17	
Electrical Tape	Black / 15mm (0.6") Width	
AC Input Cable	90KW	4*2AWG+1*5AWG、3*2AWG+1*5AWG
	120KW	4*1AWG+1*4AWG、3*1AWG+1*4AWG
	150KW	4*0AWG+1*3AWG、3*0AWG+1*3AWG
	180KW	4*0AWG+1*3AWG、3*0AWG+1*3AWG
	240KW	4*(3/0AWG)+1*1AWG、3*(3/0AWG)+1*1AWG
Ring Terminal	<ol style="list-style-type: none"> <li>Ring terminal for L1, L2, L3, N (Inner Diameter: 10.5mm (0.41"), Outer Diameter: 28.5 (1.12"))</li> <li>Ring terminal for PE (Inner Diameter: 10.5mm (0.41"), Outer Diameter: (28.5mm 91.12"))</li> </ol>	
Crimping Pliers for Ring Terminal	DIN 70121/ISO15118	
Wire Stripper		
Wire Cutters	5T	
Crane/ Forklift	>2204 lbs. (1000 kg)	

### 11.6.2 Recommended Tools for Inspection & Commissioning

Type	Description
EV or EV Simulator	Meet CCS Standard
Multiple Meter	1000V
Current Probe	400Amp
RFID Authorized Card	
RFID No Valid Card	
Door Key	
Needle-Nose Plier	
Laptop or PC & CAT6 cable	For Charger Configuration
Wi-Fi /4G signal quality checker	Recommended