

INSTALLATION GUIDE



OCULAR IQ TOWER IOCAP06C-7 / IOCAP06C-22

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CONTENTS

Specifications	03
Features	04
Product Overview	04
Safety Instructions	05
Installation	06
<i>Tools Required</i>	
<i>Overview of Steps</i>	
<i>Step One - Check Box Contents</i>	
<i>Step Two - Concrete Anchoring</i>	
<i>Step Three - Power Cable Wiring</i>	
<i>Step Four - Internet Connection</i>	
<i>Step Five - Verify The Installation</i>	
<i>Step Six - Secure Cover</i>	
LCD Display Details	10
Troubleshooting	11
Maintenance & Repair	11

IMPORTANT!

READ THIS ENTIRE DOCUMENT BEFORE INSTALLING OR USING THE CHARGER. FAILURE TO DO SO OR TO FOLLOW ANY OF THE INSTRUCTIONS AND WARNINGS IN THIS DOCUMENT CAN RESULT IN FIRE, ELECTRICAL SHOCK, SERIOUS INJURY OR DEATH.

THE CHARGER MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN.

THE ENTIRE INSTALLATION MUST COMPLY WITH THE LATEST "AS/NZS3000:2018 & AS/NZS:3008 STANDARDS"

SPECIFICATIONS

Model	IOCAP06C-7	IOCAP06C-22
Voltage and Wiring	230V AC single-phase: LIVE, NEUTRAL, and EARTH.	400V AC three-phase: L1, L2, L3, NEUTRAL, and EARTH.
Current and Power	Maximum 32A and 7kW	Maximum 32A and 22kW
Frequency	50-60 Hz	
Internal RCCB	AC 30mA, DC 6mA Type B RCCB x 2	
Internal MCB	50A MCB x 2	
SPD	40kA SPD x 2	
Data Protocol	OCPP 1.6J	
Charging Connector	IEC62196 Type-2 socket or 5m type-2 cable	
Buttons	Physical Button for socket selection x 2	
RFID	ISO 14443 A/B	
Display	7" LCD Display	
Network Connectivity	Ethernet, WLAN, optional 4G Cellular	
Working Temperature	-30°C to 55°C	
Storage Temperature	-40°C to 80°C	
Working Humidity	95% relative humidity without condensation	
Dimension (H x W x D)	1420 x 340 x 195	
Weight	33 Kg	35 Kg
IP Rating	IP55	
Certifications	IEC/ EN 61851-1, IEC/EN 61851-21-2, IEC/ EN 61000-3	

PRODUCT OVERVIEW

- 1 Wi-Fi & 4G Antenna
- 2 LED Indicator
- 3 Optional Programmable Button
(Charging Port Selection is set up as default)
- 4 7" LCD screen
- 5 RFID card reader
- 6 Internal MCB-RCD circuit



FEATURES

Integrated RCD Type B

The Ocular IQ Tower is designed to meet and comply with the AS/NZS3000:2018 Wiring Rules

With an inbuilt integrated RCD Type B, the installer will only need to install a Type A RCBO at the distribution board.

LCD Screen & RFID Reader

The Ocular IQ Tower is equipped with a 7 inch LCD screen allowing users to know the status of the charger. Details about the LCD screen can be found on pages 10 – 12.

The Ocular IQ Tower charger comes with an inbuilt RFID reader to allow for access control to the charging station. The RFID Reader is compatible with all ISO 14443 A/B RFID Cards.

Self-Monitoring & Recovery

The charger will automatically resume charging after a minor fault such as OVP, UVP, OTP or OCP with no user intervention required.

OCPP 1.6J Full Profiles & Smart Charging Support

The charger supports OCPP 1.6J full profiles, including the latest smart charging to balance the load of charging stations with limited power supply.

SAFETY INSTRUCTION

WARNING!

Do not install or use the charger near flammable, explosive, harsh, or combustible materials, chemicals, or vapors.

Turn off input power at the circuit breaker before installing or maintaining.

Do not use or stop using the charger if it is defective, appears cracked, frayed, broken or otherwise damaged, or fails to operate.

Do not attempt to open, disassemble, repair, tamper with, or modify the charger. The charger is not user serviceable. Contact your installer for any repairs.

Do not use the charger when either you, the vehicle or the charger is exposed to severe rain, snow, electrical storm or other inclement weather.

Do not touch the charger sockets with sharp metallic objects, such as wire, tools or needles.

Do not put fingers into the charger sockets.

Do not use this charger if the EV charging cable is frayed, has broken insulation, or displays any other indication of damage.

Do not use this charger if the enclosure or the EV charging connector is broken, cracked, open, or shows any other indication of damage.

CAUTIONS!

The charger should be installed only by a qualified electrician.

Make sure that the materials used and the installation procedures follow local building codes and safety standards.

Incorrect installation and testing of the charger could potentially damage either the vehicle's Battery and/or the charger itself. Any resulting damage is excluded from the warranty for both the vehicle and the charger. Do not operate the charger in temperatures outside its operating range of -30°C to +50°C.

Ensure that the EV charging cable is positioned properly to the charging sockets. Do not use cleaning solvents to clean any of the charger's components.

Be careful not to damage the circuit board when removing the power entry knock-out.

INSTALLATION

Tools Required

- Slotted #6 screwdriver
- Philips #2 screwdriver
- Terminal crimper
- Adjustable spanner

Overview of Steps

TURN OFF THE POWER SUPPLY.

Then follow these steps to install the Charger:

No.	Steps
1	Check box contents.
2	Concrete anchoring.
3	Power cable wiring.
4	Internet connection.
5	Verify the installation.
6	Secure cover and power up.

Step 01 - Check Box Contents

If any components are damaged or missing, please contact your installer or Ocular charging.



Pedestal Charger



Backplate Key x 1



Terminal crimps x 5

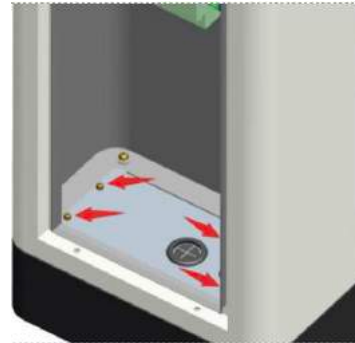
INSTALLATION

Step 02 - Floor Mounting

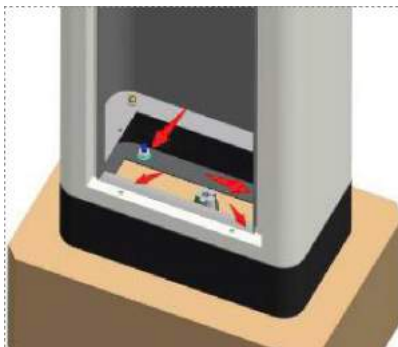
01. Open the charger backplate with the key provided.



02. Remove the screws and open the guard plate.



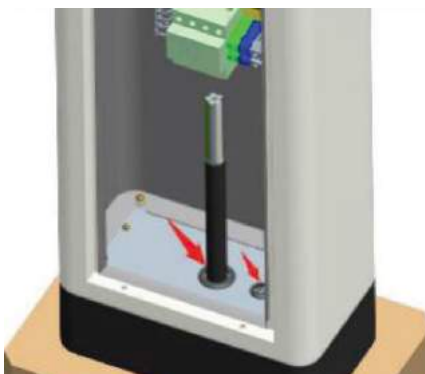
03. Anchor the charger to the concrete basement



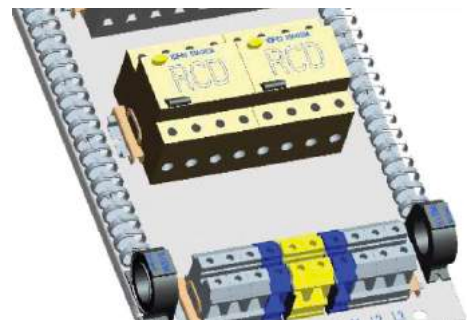
Step 03 - Power Cable Wiring

Note: Power cables must be crimped with suitable ferrules otherwise product warranty will be voided

01. Cross the power cables through guard plate.



02. Connect the power cables to the connector board.

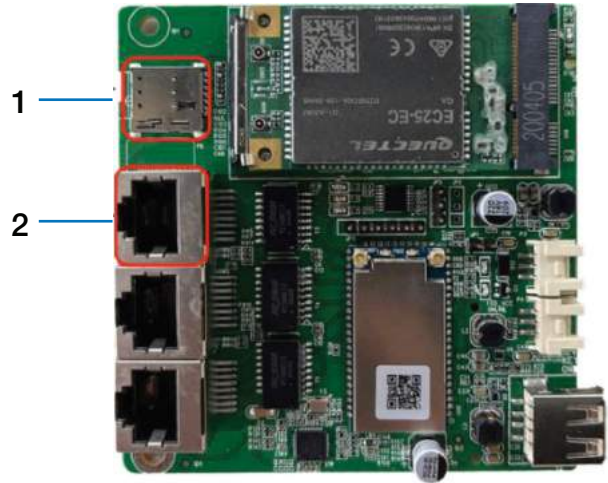


INSTALLATION

Step 04 - Internet Connection

Option 01. Cellular & Ethernet

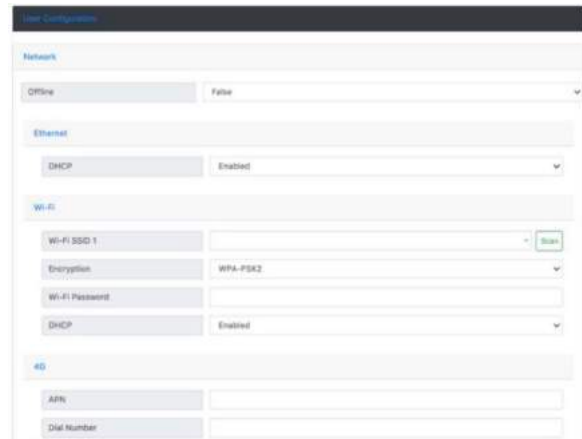
No.	Item
1	Insert SIM card to the card slot for cellular connection.
2	Connect the internet cable for Ethernet connection.



Option 02. Wi-Fi

a) Connect your device to the charger Wi-Fi SSID 'ioc-XXXXXX', and enter default password 'IOC12345'.

b) Open web-based setup page by entering the default IP Address '192.168.10.1:8900', and enter Username 'admin' and Password 'ioc12345' then click 'ok'.



Additional Notes

No.	Item
1	Change the value to 'true' to activate the offline mode.
2	Ethernet supporting DHCP or static IP.
3	Scan the Wi-Fi to select the SSID to be connected.
4	Enter parameters from your ISP provider for cellular connection.

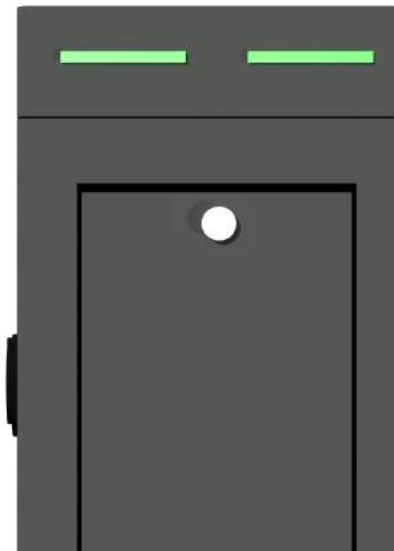
INSTALLATION

Step 05 - Verify The Installation

No.	Steps
1	Verify the power cables are wired properly.
2	Close the RCD to power on the charger unit, and you should see the LED lights sequentially illuminate green.
3	If the LED red light illuminates or flashes, refer to the Troubleshooting table on page 11.
4	Check on the screen display whether internet is available and back office is connected, refer to page 10.
5	Test the live charging process with simulator or electric vehicle if the installation is completely verified.

Step 06 - Secure Cover

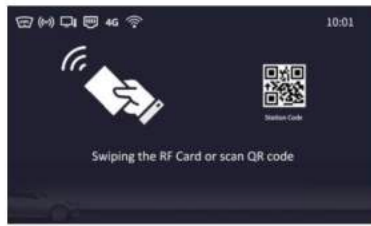
01. Reposition the backplate to the charger and lock it with the key.
02. Seal the back cover



LCD DISPLAY SCREEN



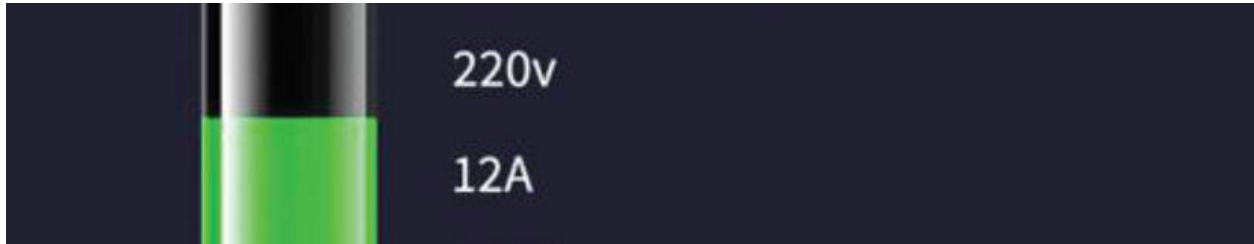
Welcome Screen



Scan the QR code or swipe the RFID card to start charging



Connect the charging plug



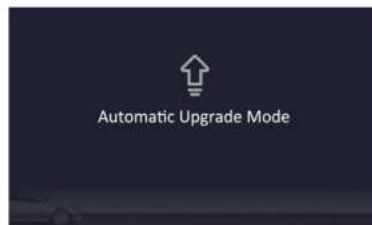
Charging in process

Suspended by EV

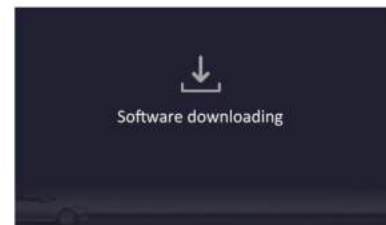
Suspended by EVSE



Remove the charging plug



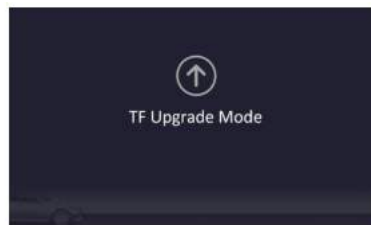
Automatic upgrade mode activated



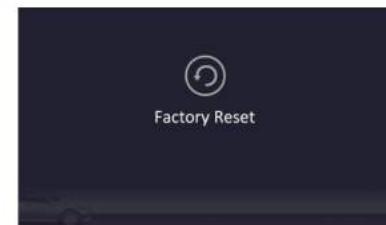
Software downloading and upgrading automatically



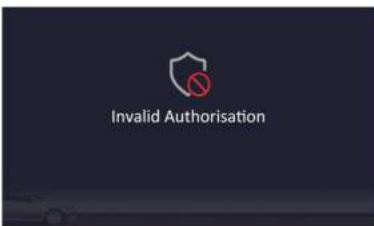
Network upgrade mode



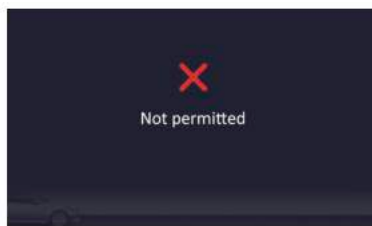
Micro SD card upgrade mode



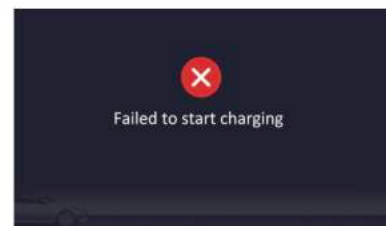
Factory reset activated



Invalid authorisation



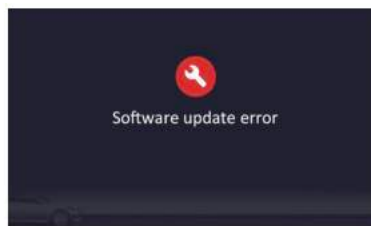
Not permitted to charge



Failed to start charging



Service not available



Software update error



Explanation of icons

TROUBLESHOOTING

Situations	Actions
Status indicator is not green after the charger is powered on.	1 Make sure the AC power input is connected correctly.
	2 Turn OFF the charger and then back ON using the switch.
	3 If the problem persists, please contact your installer or Ocular charging.
Status indicator does not flash green when the charger is connected to the EV.	1 Unplug the charging plug and reconnect it fully to the receptacle on the EV.
	2 Inspect the cable and plug for damage.
	3 Inspect the EV and its receptacle for damage.
	4 Try to charge with the portable cord set that came with the vehicle; if the problem persists, please contact your installer or Ocular Charging.
Status indicator flashes red while charging.	1 There is a temporary error.
	2 Wait until the temporary error is resolved and the pedestal charger returns to normal condition. It usually takes less than 10 seconds.
	3 If the status indicator doesn't return to green, turn OFF the pedestal charger, and then back ON using the switch.
	4 If the problem persists, please contact your installer or Ocular Charging.
Status indicator is solid red.	1 There is a critical error.
	2 Unplug the charging plug from the EV immediately.
	3 Turn OFF the pedestal charger and then back ON using the switch.
	4 If the problem persists, please contact your installer or Ocular Charging.

MAINTENANCE & REPAIR

- Regularly inspect the Charger. If damage is found, contact your installer or Ocular Charging.
- The Charger contains no user-serviceable components. If unit is not operating correctly, contact your installer or Ocular Charging.
- Wipe the outside of the Pedestal Charger regularly with a clean damp cloth to remove any accumulation of dust and dirt to prevent rust.

OCULAR
CHARGE WITH VISION