INSTALLATION GUIDE

OCULAR IQ COMMERCIAL
IOCAW05C-7S/7T / IOCAW05C-22S/22T

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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	IOCAW05C-7S/7T	IOCAW05C-22S/22T
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 RCD	RCD Type-B	
Data Protocol	OCPP 1.6J	
Charging Connector	IEC62196 Type-2 socket or 5m type-2 cable	
Buttons	1 x Physical Button	
RFID	ISO 14443 A/B	
Display	7 inch LCD Display	
Network Connectivity	Ethernet, WLAN, optional 4G Cellular	
Working Temperature	-30°C to 50°C	
Storage Temperature	-40°C to 70°C	
Working Humidity	5% - 95% without condensation	
Dimension (H x W x D)	400 x 270 x 130 mm	
Weight	12 Kg	12.5Kg
IP Rating	IP55	
Certifications	IEC/ EN 61851-1:2020, IEC/EN 61851-21-2, IEC/ EN 61000-3	

PRODUCT OVERVIEW

1	Wi-Fi & 4G Antenna
2	LED Indicator
3	Optional Programmable Start/Stop Button
4	7" LCD screen
5	RFID card reader
6	Universal Type 2 Socket

FEATURES

Integrated RCD Type B

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

With an 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 Commercial 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 Commercial 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.

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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
- Electric drill

Overview of Steps

TURN OFF THE POWER SUPPLY.
Then follow these steps to install the Charger:

No.	Steps
1	Check box contents.
2	Wall mounting with backplate or pole mounting on the pedestal.
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.

EV Charger

RCD Box Key x 1
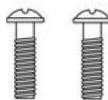
Screw M6*10 x 2

Wall Mounting Bracket x 1

Screw M6*12 x 1

Dynabolts x 4

INSTALLATION

Step 02 - Wall Mounting

01. Mount the backplate to the wall.
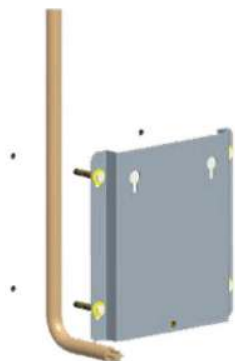
02. Fix 2 x M6*10 screws to the back of the EV Charger and hang on the backplate.

03. Fix the EV charger to the backplate with M6*12 screw.
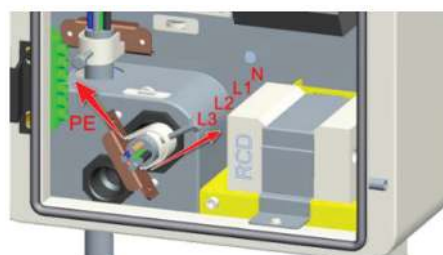

Step 03 - Power Cable Wiring

01. Cross the power wires through the bottom hole.

02. Connect the power wires to the terminal board, and make sure that the PE cable passes through the CT clamp.
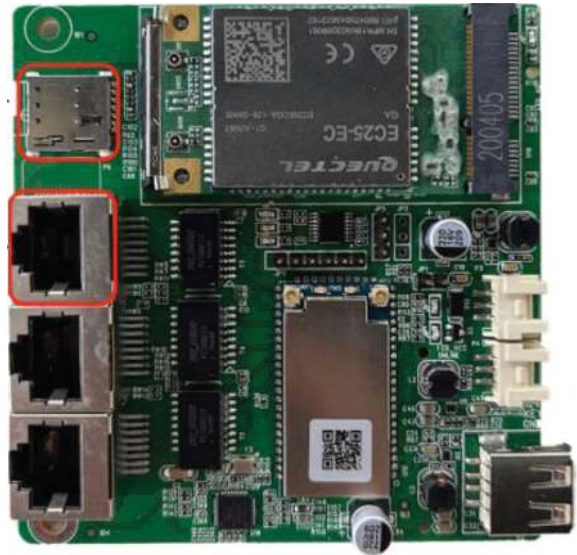
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## Step 04 - Internet Connection

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'.
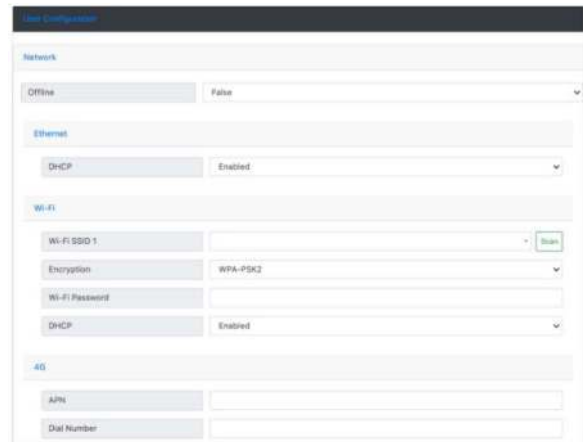
Additional Notes

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.

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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

Secure the EV Charger with screws and lock RCD box with the key.

LCD DISPLAY SCREEN

Welcome Screen

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

Connect the charging plug
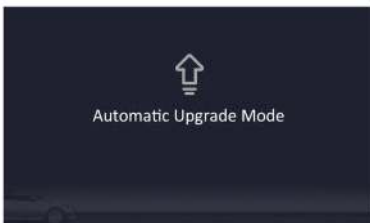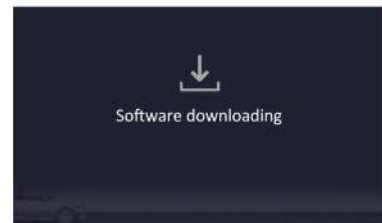

Charging in process

Suspended by EV

Suspended by EVSE
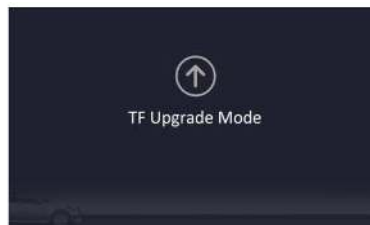

Remove the charging plug

Automatic upgrade mode activated
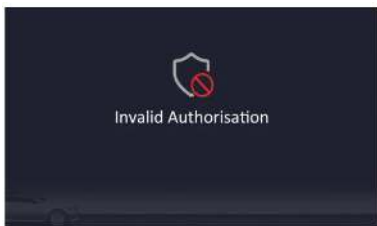

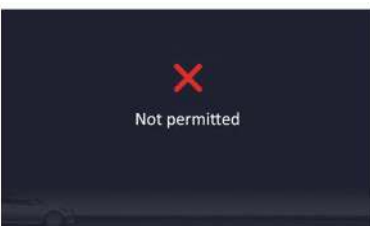Software downloading and upgrading automatically

Network upgrade mode
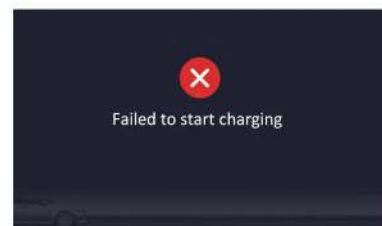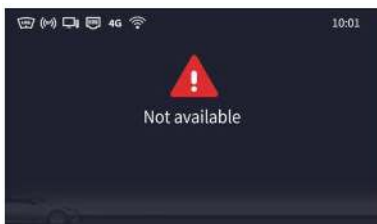

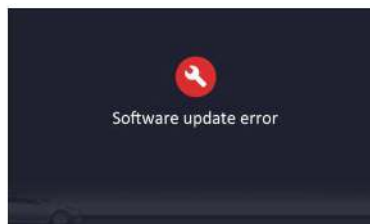Micro SD card upgrade mode

Factory reset activated

Invalid authorisation

Not permitted to charge

Failed to start charging

Service not available

Software update error

Explanation of icons

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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.

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CHARGE WITH VISION