Quick Start Guide

802.11ac Wave 2 Dual-Band Enterprise Access Point
OAP100e

Package Contents

1. OAP100e access point
2. Mounting kit—2 brackets and 2 steel hose clamps
3. (Optional) Mounting bracket
4. DC Terminal plug
5. 2 x Cable glands

6. 2 x Port covers
7. 2 x External 5G omni antennas
8. Console cable—RJ-45 to DB-9
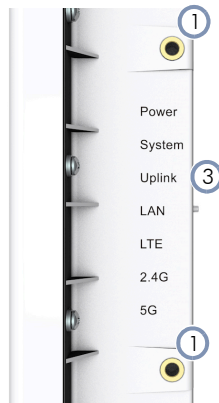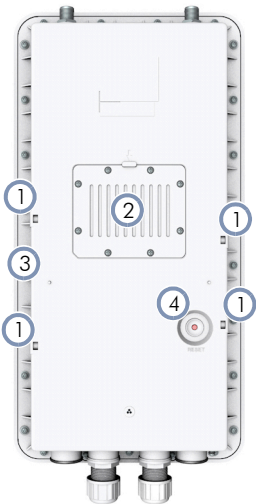9. QR code card

---

Overview

1. Grounding point
2. Console port
3. LAN (PoE Out) port: 1Gbps connection to a LAN device

4. Uplink (PoE In) port: 1Gbps uplink connection with 802.3at PoE support
5. DC In port: 24 Vdc
6. 5G Antenna connector

1. Mounting points
2. Enclosure
3. LEDs:
   - Power: On red (power OK)
   - System: On green (power OK), Blinking (boot up)
   - Uplink: On amber (1Gbps link), On green (10/100Mps link), Blinking (traffic)
   - LAN: On amber (1Gbps link), On green (10/100Mps link), Blinking (traffic)
   - LTE: function not supported
   - 2.4G: On blue (radio on), Blinking (traffic)
   - 5G: On blue (radio on), Blinking (traffic)
4. Reset button
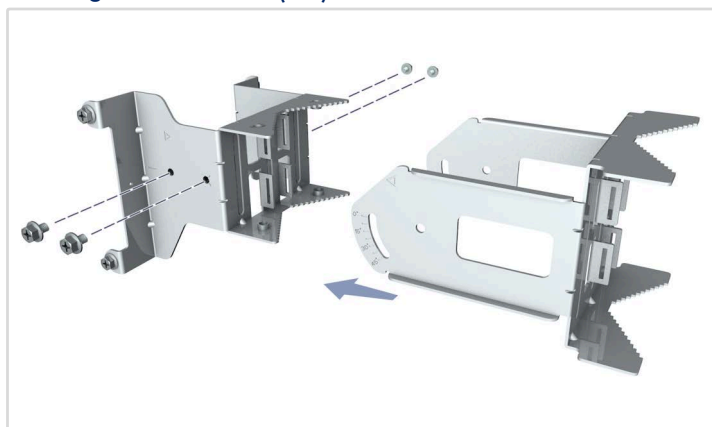

Installation

1 Mount the AP

The included mounting brackets are designed for pole mounting and provide additional degrees of movement for antenna alignment.

a. Using a Single Bracket (Parallel)

1. Install the bracket onto the AP using the included four screws.
2. Thread the included steel hose clamps through the eyelets on the back of the Mounting Bracket and then lightly fasten them around the pole. Both hose clamps must be used for pole mounting.

b. Using Two Brackets (Tilt)

1. Attach the two main sections of the bracket using the four included screws and lock nuts.

2. Install the bracket onto the AP using the included four screws.
3. Thread the included steel hose clamps through the eyelets on the back of the Mounting Bracket and then lightly fasten them around the pole. Both hose clamps must be used for pole mounting.

c. (Optional) Using Two Brackets (Perpendicular)

1. Attach the two main sections of the bracket using the four included screws and lock nuts. This requires an optional bracket.
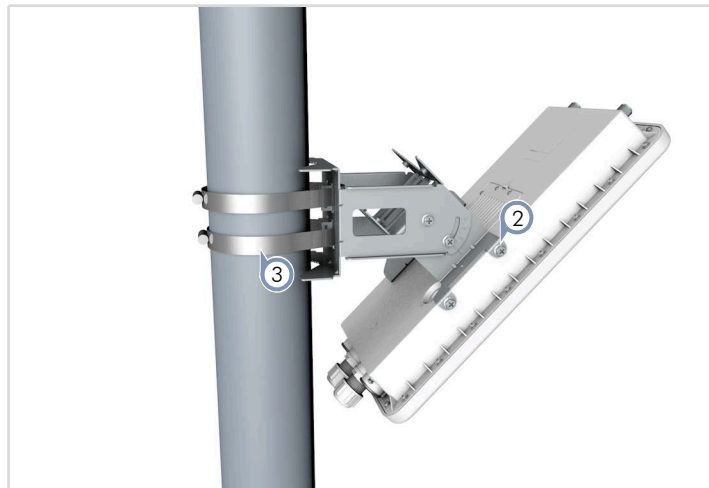

2. Install the bracket onto the AP using the included four screws.
3. Thread the included steel hose clamps through the eyelets on the back of the Mounting Bracket and then lightly fasten them around the pole. Both hose clamps must be used for pole mounting.
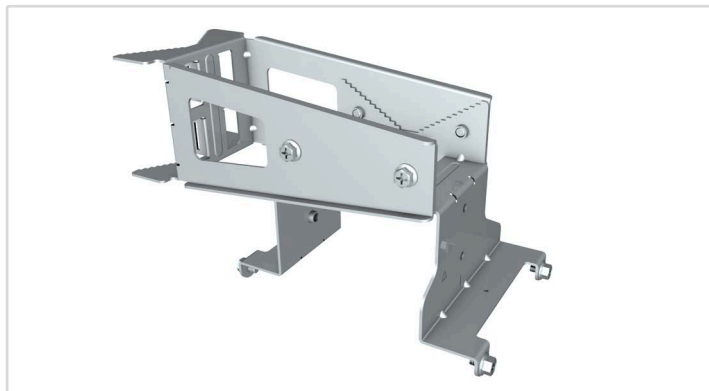
2 Ground the AP

Ground the AP by connecting a ground wire to the grounding point on the device and to nearby good earth.

3 Install the 5G Antennas

Install approved cellular 5G omni external antennas to improve coverage and performance.

3 Connect Cables

a. Connect LAN Cables

> [i] **Note:** Port covers and cable glands should be tightned to a torque of 10 kgf.cm.

1. Connect Category 5e or better cable to the Uplink (PoE In) 1000BASE-T RJ-45 port. When connected to a PoE source, the Uplink (PoE In) port connection provides power to the unit.

2. (Optional) Connect a local LAN switch, computer or other device to the LAN (PoE Out) 1000BASE-T RJ-45 port.
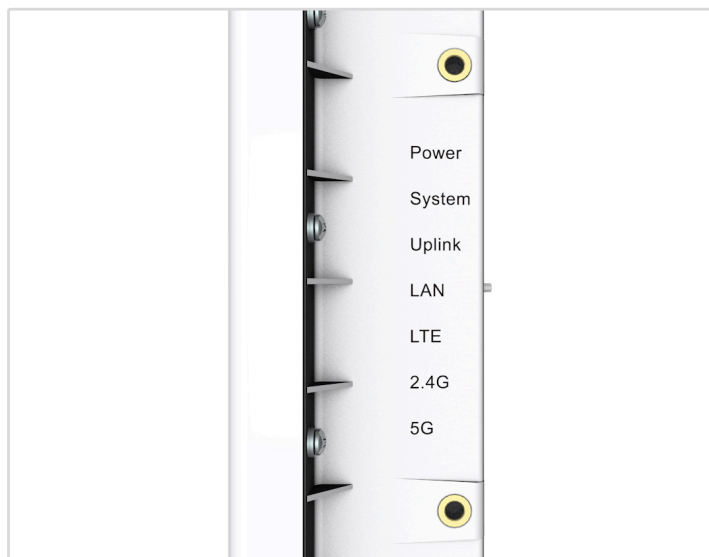
b. (Optional) Connect DC Power

When not connected to a PoE source, wire the included DC terminal plug to a 10–24 VDC, 0.5-1 A source to provide power to the AP.

c. (Optional) Management Connections

Connect an RJ-45 to DE-9 straight-through console cable and then configure the serial connection: 115200 bps, 8 characters, no parity, one stop bit, 8 data bits, and no flow control.

4 Check AP LEDs

Power and System LEDs—on green for normal operation.

5 Connect to the Web User Interface

1. Connect a PC directly to the AP's LAN (PoE Out) port.

2. Set the PC IP address to be on the same subnet as the AP LAN port default IP address. (The PC address must start 192.168.1.x with subnet mask 255.255.255.0.)

3. Enter the AP's default IP address of 192.168.1.10 into the web browser address bar.

> [i] **Note:** To connect to the web interface using the Uplink (PoE In) port, the IP address is automatically assigned through DHCP by default. If a DHCP server is unreachable, the Uplink(PoE) port reverts to a fallback IP address of 192.168.1.10.

4. Log in to the web interface using default settings:
   Username = admin
   Password = admin

Safety and Regulatory Information

FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

IMPORTANT NOTE:
FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 46 cm between the radiator and your body.

Professional Installation Instructions

1. Installation personnel
This product is designed for specific applications and should be installed by qualified personnel who have knowledge of RF and its related regulations. A general user shall not attempt to install or modify the equipment configuration.

2. Installation location
To meet regulatory RF exposure requirements, this product shall be installed at a location where, during normal operations, the radiating antenna is at least 46 cm away from any nearby persons.

3. External antenna
Use only the antennas which have been approved by the applicant. Using non-approved antenna(s) is prohibited and may produce unwanted spurious or excessive RF transmitting power which may lead to a violation of FCC limits.

4. Installation procedure
Please refer to this equipment's user manual for the procedure details.

5. Warning
The installation position must be carefully selected so that the final output power does not exceed the limit set forth in relevant regulations. Violation of output power regulations could lead to serious federal penalties.

CE Statement

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

All operational modes:

2.4 GHz: 802.11b, 802.11g, 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20), 802.11ac (VHT40), 802.11ax (HE20), 802.11ax (HE40)

5 GHz: 802.11a, 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20), 802.11ac (VHT40), 802.11ac (VHT80), 802.11ax (HE20), 802.11ax (HE40), 802.11ax (HE80)

BLE 2.4 GHz: 802.15.1

The frequency and maximum transmitted power limit in EU are listed as below:

2412-2472 MHz: 20 dBm
5150-5350 MHz: 23 dBm
5500-5700 MHz: 30 dBm

AT	BE	BG	CH	CY	CZ
DE	DK	EE	EL	ES	FI
FR	HR	HU	IE	IS	IT
LI	LT	LU	LV	MT	NL
NO	PL	PT	RO	SE	SI
SK	TR	UK			

The abbreviations of the countries, as prescribed in above table, where any restrictions on putting into service or any requirements for authorization of use exist.

CE

CE Mark Declaration of Conformance for EMI and Safety (EEC)

This information technology equipment is in compliance with the Directive 2014/53/EU and Directive 2014/35/EU.

The Declaration of Conformity (DoC) can be obtained from www.edge-core.com -> support -> download.

Warnings and Cautionary Messages

Warning: This product does not contain any serviceable user parts.
Warning: Installation and removal of the unit must be carried out by qualified personnel only.

Caution: Wear an anti-static wrist strap or take other suitable measures to prevent electrostatic discharge when handling this equipment.
Caution: Do not plug a phone jack connector in the RJ-45 port. This may damage this device.
Caution: Use only twisted-pair cables with RJ-45 connectors that conform to FCC standards.

Hardware Specifications

AP Chassis

Size (WxDxH)	230 x 450 x 65 mm (9.06 x 17.72 x 2.56 in.)
Weight	2.3 kg (5.07 lb)
Temperature	Operating: -40° C to 65° C (-40° F to 149° F) Storage: -40° C to 70° C (-40° F to 158° F)
Humidity	Operating: 5% to 95% (non-condensing)

Network Interfaces

Ports	Uplink (PoE In) RJ-45 Port: 1000BASE-T, PoE PD LAN (PoE Out) RJ-45 Port: 1000BASE-T, PoE PSE
2.4 GHz Radio	IEEE 802.11b/g/n
5 GHz Radio	IEEE 802.11a/ac/n
Bluetooth	BLE/BT4.1
Radio Frequencies	2.4–2.4835 GHz (US and ETSI) US 5.15–5.25 GHz (lower band) 5.725–5.825 GHz (upper band) Europe 5.15–5.25 GHz, 5.25–5.35, 5.47–5.725 GHz

Power Specifications

PoE Input Power	22.4 W max 802.3at-compliant
DC Power	24 VDC, 1.09 A

Regulatory Compliances

Radio	EN 300 328 V2.2.2 (2.4G/BT-LE) EN 301 893 V2.1.1 (5G) EN 303 413 V1.1.1 (GPS) EN 50385 / EN 62311: 2017 (MPE)
Emissions	EN 301 489-1 V2.1.1 EN 301 489-17 V3.1.1 EN 301 489-52 V1.1.0
Safety	EN 62368-1: 2014 + A11: 2017 EN 60950-22: 2017 IEC 62368-1: 2014 (Second Edition) IEC 60529: 1989+AMD1: 1999+ AMD2: 2013CSV (IP68)

Warranty Information and Technical Support

Registering your product enables you to receive a more efficient warranty service. Be sure to register at www.edge-core.com.