Edge-corE ®

Quick Installation Guide

OAP100

Access Point

Copyright Notice

This document is protected by USA copyright laws and other laws. Besides, the document is the property of Edgecore Networks Corporation. You may not copy, reproduce, distribute, publish, display, perform, or modify any part of this publication in any form or by any means without prior written permission from Edgecore Networks Corporation. You may not alter or remove any copyright or other notice from copies of the content. All other brand and product names are claimed or registered marks of their respective companies or organizations.

All rights reserved.

FCC CAUTION

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 or more 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.**

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.

47 CFR FCC Part 15, Subpart B, Class B
47 CFR FCC Part 15.247 (2.4G/BT-LTE)
47 CFR FCC Part 15.407 (5G)

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 transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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 187 cm between the radiator & your body.

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

Professional installation instruction

1. **Installation personal**

   This product is designed for specific application and needs to be installed by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting. Professional installation is required.

2. **Installation location**

   The product shall be installed at a location where the radiating antenna can be kept 187 cm from nearby person in normal operation condition to meet regulatory RF exposure requirement.

3. **External antenna**

   Use only the antennas which have been approved by the applicant. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC limit and is prohibited. The antenna must be installed completely perpendicular to the horizon for compliance with FCC Rule Part 15.407(a)(1)(i).

4. **Installation procedure**

   Please refer the handbook for the detail.

5. **Warning**

   Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.

CE CAUTION

Hereby, Edgecore Networks Corporation. declares that the radio equipment type OAP100 is in compliance with Directive 2014/53/EU.

AT	BE	BG	HR	CY	CZ	DK
EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL
PT	RO	SK	SI	ES	SE	UK

Input Power

Power from PoE: IEEE802.3at

Operation Temperature

-20℃ (-4℉) to 65℃ (149℉)

Model – OAP100

The device has been tested and passed the requirements of the following standards, and hence fulfills the EMC and safety requirements of RED within the CE marking requirement.

- Radio

    - EN 300 328 V2.1.1 (2.4G/BT-LE)

    - EN 301 893 V2.1.1 (5G)

    - EN 301 908-1 V11.1.1 (LTE)

    - EN 303 413 V1.1.1 (GPS)

    - EN 50385 / EN 62311: 2017 (MPE)

- EMC

    - EN 301 489-1 V2.1.1

    - EN 301 489-17 V3.1.1

    - EN 301 489-52 V1.1.0

- Safety:

    - EN 60950-1: 2006 + A11: 2009 + A12: 2011 + A2: 2013

    - EN 60950-22: 2017

    - IEC 62368-1: 2014 (Second Edition)

    - IEC 60529: 1989+AMD1: 1999+ AMD2: 2013CSV (IP55)

Caution

- This declaration is only valid for configurations (combinations of software, firmware, and hardware) provided and supported by Edgecore Networks Corporation. The use of software or firmware not provided and supported by Edgecore Networks Corporation. may result in the equipment no longer being compliant with the regulatory requirements.

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

- In order to ensure compliance with the exposure recommendations to electromagnetic fields, the device should be used at a minimum distance of 20cm from the body.

Taiwan NCC Statement

根據 NCC 低功率電波輻射性電機管理辦法 規定:	
第十二條	經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
第十四條	低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

減少電磁波影響，請妥適使用

Preface

Edgecore OAP100 Outdoor Access Point is an enterprise-grade dual radio 802.11 a/b/g/n + ac Wave 2 Access Point with the best performance for business and industrial applications. Featuring two 2x2 MIMO radios, the OAP100 can simultaneously support up to 300 and 867 Mbps data rates in the 2.4 GHz and 5 GHz bands respectively.

OAP100 is compliant with the latest industrial wireless security standards such as 802.1X and Wi-Fi Protected Access (WPA and WPA2) which are required in the tightly secured enterprise network environments. Furthermore, OAP100 also features multiple ESSIDs with VLAN tags and multiple Virtual APs; great for enterprise applications, such as separating traffic from different departments using different ESSIDs.

As an Outdoor Access Point, OAP100 supports wall mounting and poll mounting for different deployment environments. Besides OAP100's PoE uplink port is able to receive power from Power over Ethernet (PoE) sourcing devices, its LAN port also supports PoE with 802.11at standard which make network deployment more convenient and easier.

This Quick Installation Guide provides instructions and reference materials to get you started with Edgecore OAP100.

Package Contents

1. Edgecore OAP100 x 1
2. Quick Installation Guide (QIG) x 1
3. Terminal Plug
4. Mounting Bracket-1 x 1
5. Mounting Bracket-2 x 1
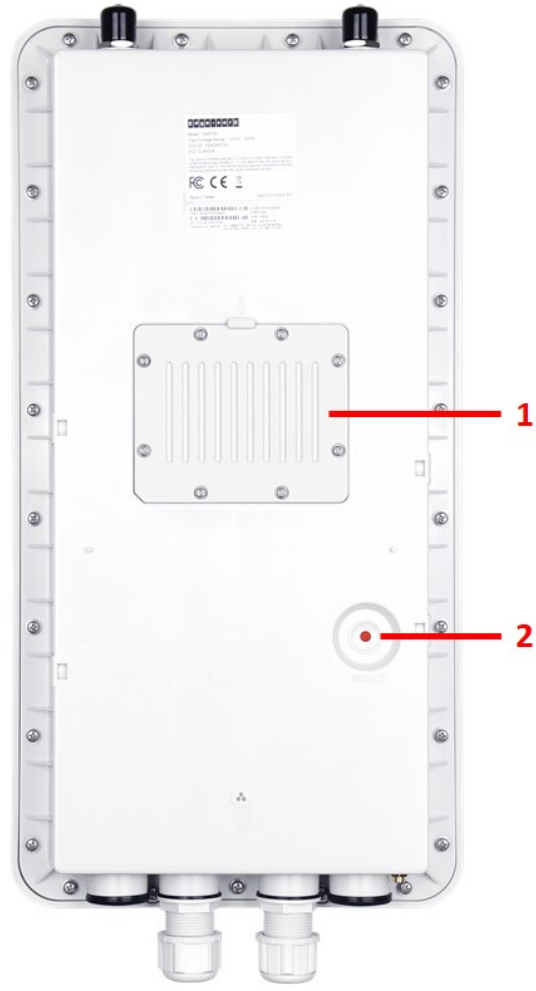6. Mounting Bracket-3 x 1 (Optional)

⚠ *It is recommended to keep the original packing material for possible future shipment when repair or maintenance is required. Any returned product should be packed in its original packaging to prevent damage during delivery.*
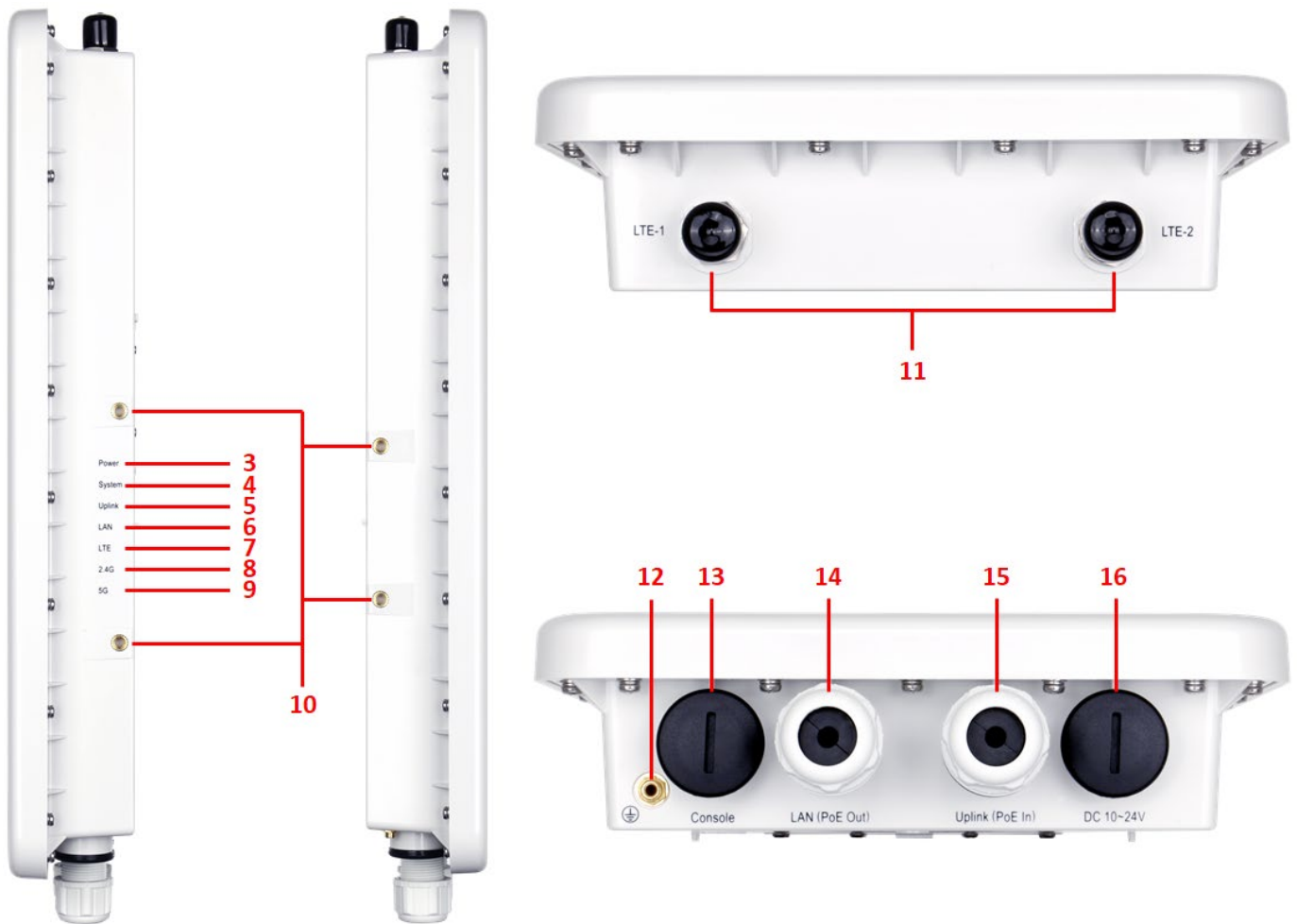
System Overview
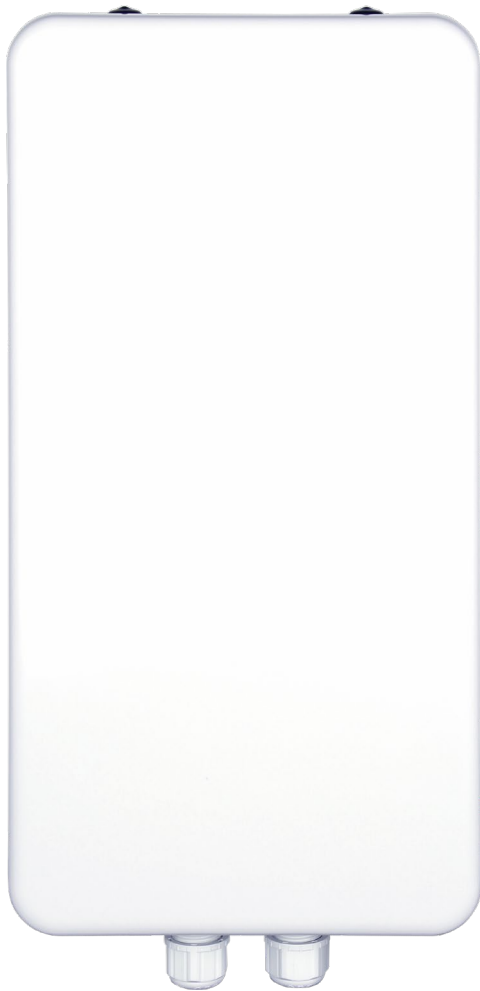
OAP100 Front

OAP100 Back

1	LTE Module Case	For inserting optional LTE Module.
2	Reset	Press once to restart the system; to reset the system to factory default settings, hold for more than 5 seconds (the System LED will blink fast).

OAP100 Side

3	**Power LED**	The Power LED will always on when OAP100 power up.
4	**System LED**	The System LED will always on when OAP100 power up. When OAP100 is booting or rebooting, the System LED will blink.
5	**Uplink LED**	There is uplink traffic, the Uplink LED will blink. The orange LED will light up when the link speed is 1Gbps. The green LED will light up when the link speed is 10/100Mbps.
6	**LAN LED**	There is LAN traffic, the LAN LED will blink. The orange LED will light up when the link speed is 1Gbps. The green LED will light up when the link speed is 10/100Mbps.
7	**LTE LED**	The LTE LED will always on when OAP100's network is from LTE. There is LTE traffic, the LTE LED will blink.
8	**2.4G LED**	2.4G Wi-Fi status. There is 2.4G traffic, the 2.4G LED will blink
9	**5G LED**	5G Wi-Fi status. There is 5G traffic, the 5G LED will blink
10	**Mounting Kit**	For mounting OAP100.

| 11	**LTE Antenna Connector**	For attaching LTE Antenna.
12	**Ground Connector**	For connecting the ground wire.
13	**Console Port**	Offering console connection for advance setting.
14	**LAN (PoE Out) Port**	The ports for connections with LAN side devices.
15	**Uplink (PoE In) Port**	Offering uplink connection. This port can be used to connect to a controller, gateway, or directly to the Internet. 802.3at PoE is also supported.
16	**DC 10~24V**	DC input is supported on OAP100.

Hardware Installation

Please follow the steps mentioned below to install the hardware of OAP100:

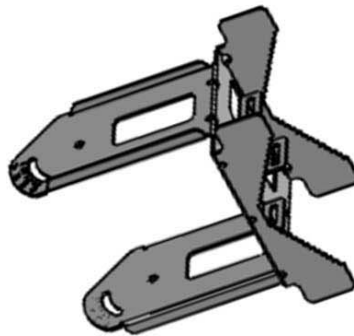### 1. Place the OAP100 at the best location.

The best location for OAP100 is usually at the center of your intended wireless network.

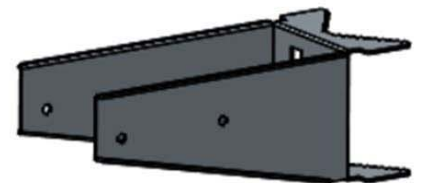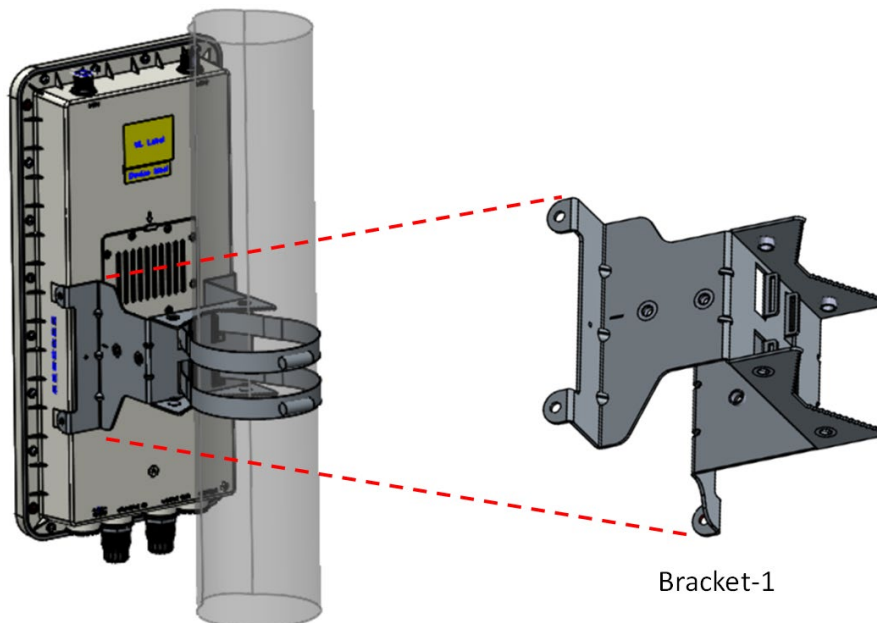There are **3** types of bracket for different deployments:
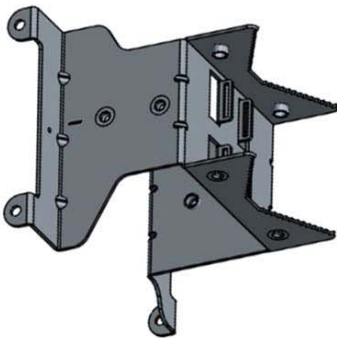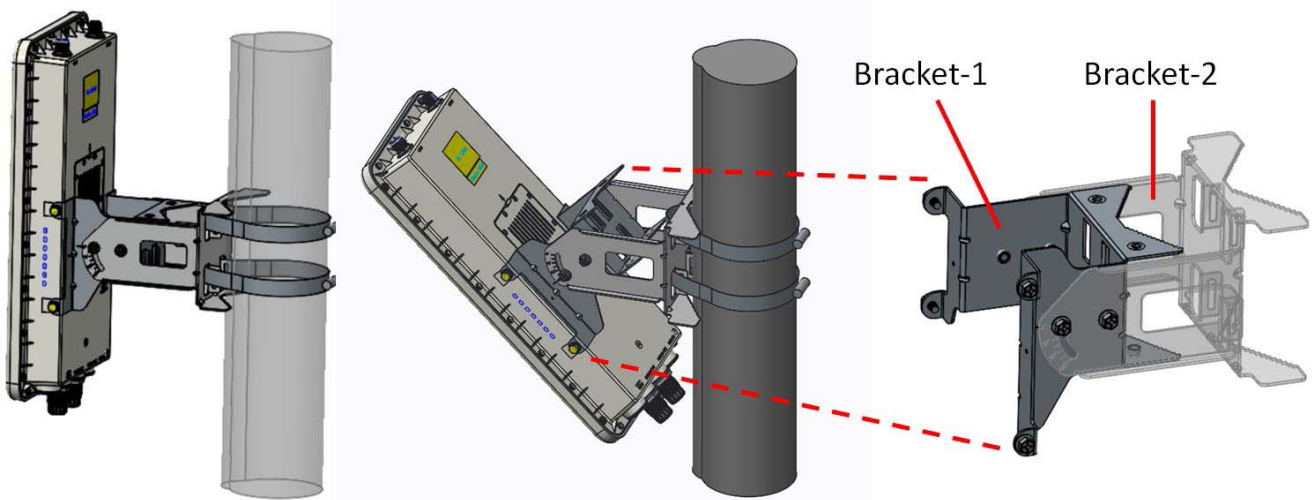
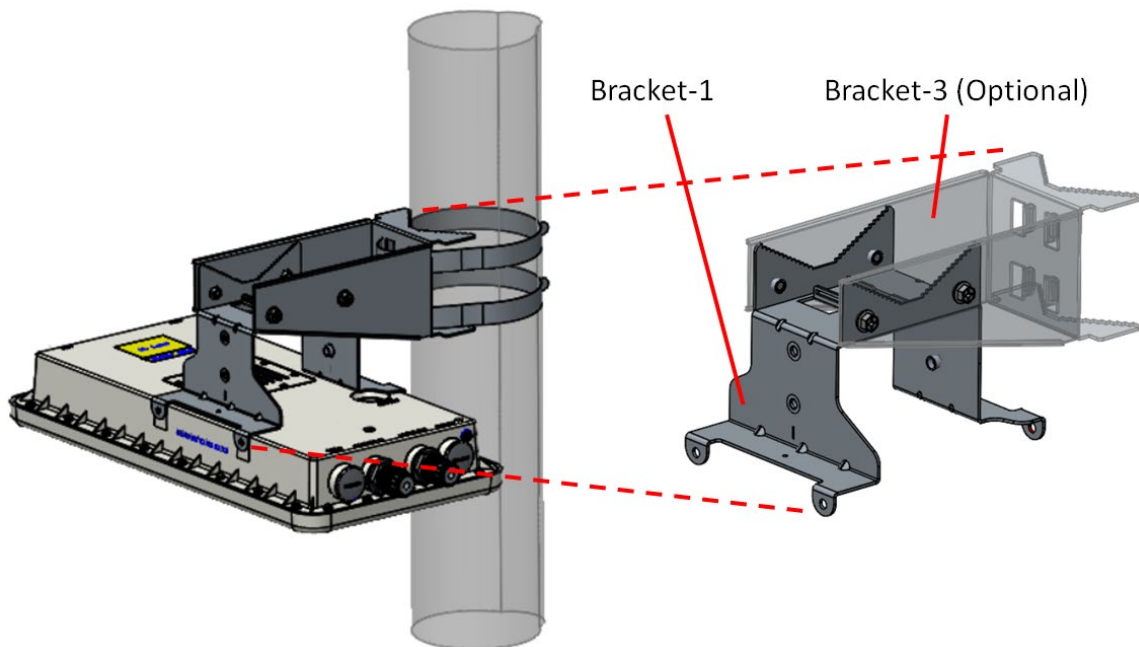Bracket-1   Bracket-2   Bracket-3 (Optional)

Pole mount with bracket-1

Bracket-1

Pole mount with bracket-1 and bracket-2

Bracket-1   Bracket-2

Pole mount with bracket-1 and bracket-3 (optional)

Bracket-1   Bracket-3 (Optional)

2. Connect the OAP100 to your network device.

Connect one end of the Ethernet cable to the LAN1 (PoE) port of OAP100 and the other end of the cable to a switch, a router, or a hub. OAP100 is then connected to your existing wired LAN network.

3. Power on the OAP100.

OAP100 Uplink (PoE In) port is capable of receiving DC currents. Connect an IEEE 802.3at-compliant PSE device (e.g. a PoE-switch) to the Uplink (PoE In) port of OAP100 with the Ethernet cable.

Now, the Hardware Installation is complete.

> ⚠️ *To verify the wired connection between OAP100 and your switch / router / hub, please also check the LED indicator of the respective network devices.*

Getting Started

Edgecore OAP100 supports web-based configuration. Upon the completion of hardware installation, Access Point can be configured through a PC by using its web browser such as Mozilla Firefox 2.0 or Internet Explorer version 6.0 and above.

The default values of LAN IP address and subnet mask of OAP100 are:

| IP Address	192.168.1.10
Subnet Mask	255.255.255.0

Steps:

1. To access the web management interface, connect the administrator PC to the LAN port of OAP100 via an Ethernet cable. Then, set a static IP address on the same subnet mask as OAP100 in TCP/IP of your PC, such as the following example:

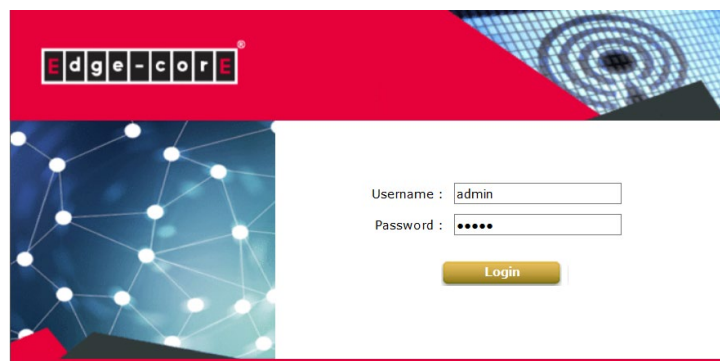   **IP Address***: 192.168.1.100*
   Subnet Mask*: 255.255.255.0*

2. Launch the web browser on your PC by entering the IP address of OAP100 (**http://192.168.1.10**) at the address field, and then press **Enter**.
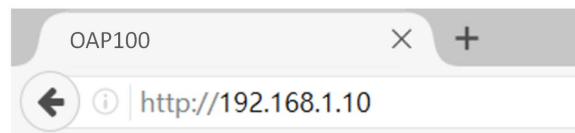
   Example of entering OAP100's default IP Address via a web browser

3. The following Admin Login Page will appear. Enter **"admin"** for both the *Username* and *Password* fields, and then click **Login**.

   Administrator Login Page

4. After a successful login into OAP100's Web user interface (Web UI), a **System Overview** page of web management interface will appear, as depicted below.

System Overview

System

System Name	Edgecore-OAP100
Firmware Version	3.45.0000
Build Number	1.2-1.9751
Location	
Latitude	Detecting...
Longitude	Detecting...
Site	EN-A
Device Time	2019/08/20 17:10:21
System Up Time	0 days, 0:06:49
CPU/RAM Usage	1.01% / 14.88% Plot

Radio Status

Antenna Option Hotspot

RF Card	MAC Address	Band	Channel	TX Power
RF Card A	80:A2:35:56:96:63	802.11g+n	6	26 dBm
RF Card B	80:A2:35:56:96:64	802.11ac	36	24 dBm

LAN Interface

MAC Address	80:A2:35:56:96:62
IP Address	10.71.44.10
Subnet Mask	255.255.0.0
Gateway	10.71.1.254

AP Status

RF Card Name : RF Card A ▼

Profile Name	BSSID	ESSID	Security Type	Online Clients	TUN
VAP-1	80:A2:35:56:96:63	4ccccccccccccccc...	Open	0	⊗

CAPWAP

Status	Disabled

✔ IPv6

Status	Disabled

The Web Management Interface - System Overview Page

Congratulations!

Now, Edgecore OAP100 is installed and configured successfully.

⚠️ *After OAP100's network configuration is completed, please remember to change the IP Address of your PC Connection Properties back to its original settings in order to ensure that your PC functions properly in its real network environments.*

- ● ***It is strongly recommended to make a backup copy of the configuration settings.***
- ● ***For further configuration and backup information, please refer to the User's Manual.***

P/N: V3450000211230