Edge-corE

Handbook

ECWO5213–L

Access Point

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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.**

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 31 cm between the radiator & your body.

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.

2. **Installation location**

   The product shall be installed at a location where the radiating antenna can be kept 31 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.

The antenna gain, antenna type and output power that can be used for the device and the info listed below are correct and represent the product.

2.4GHz antenna spec.				
Antenna No.	Frequency (MHz)	Peak Gain (dBi)	Antenna Type	Connecter Type
1	2400~2500	10.9	PIFA	IPEX
2	2400~2500	11.4		

5GHz antenna spec.				
Antenna No.	Frequency (MHz)	Peak Gain (dBi)	Antenna Type	Connecter Type
1	5150~5825	10.5	PIFA	IPEX
2	5150~5825	10.2		

CE CAUTION

Hereby, Edgecore Networks Corporation. declares that the radio equipment type ECWO5213-L is in compliance with Directive
2014/53/EU.

Frequency Range and Transmit Power

Frequency range (MHz)	Max. transmit power (dBm)
2412-2472	23 dBm
5150-5350	23 dBm
5500-5700	23 dBm

	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 – ECWO5213-L

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, EN 301 893 V2.1.1
- EMC: EN 301 489-1 V2.1.1, EN 301 489-17 V3.1.1
- EMC: EN 55032:2015 + AC:2016 Class B, EN 55024:2010 + A1:2015 including the followings:
    EN 61000-4-2, EN 61000-4-3, EN 61000-4-4,
    EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11

Safety: EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013

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 ECWO5213-L 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 ECWO5213-L can simultaneously support up to 300 and 867 Mbps data rates in the 2.4 and 5 GHz bands respectively. ECWO5213-L 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, ECWO5213-L 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, ECWO5213-L supports wall mounting and poll mounting for different deployment environments. Besides ECWO5213-L'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 Handbook provides instructions and reference materials to get you started with Edgecore ECWO5213-L.

Package Contents

1. Edgecore ECWO5213-L x 1
2. Handbook x 1
3. Metal Strip x 2

⚠ *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
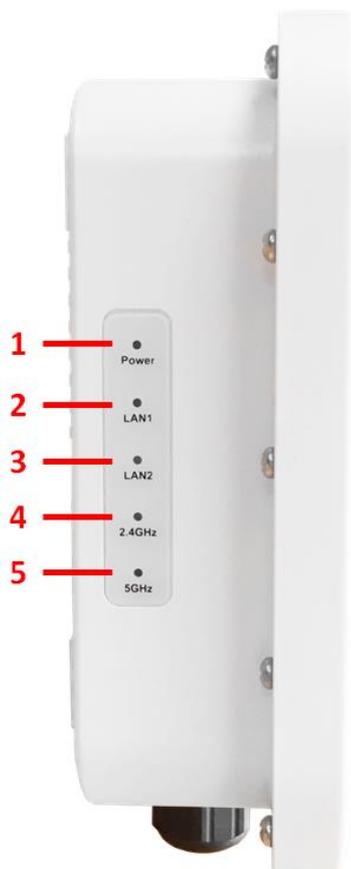
ECWO5213-L Side

ECWO5213-L Back

1	**Power LED**	ECWO5213-L status. The Power LED will start blinking when the ECWO5213-L is booting. After finishing booting, the Power LED will always on.
2	**LAN1 LED**	Uplink status. The LAN1 LED will light up when there is traffic passing through the LAN1 port.
3	**LAN2 LED**	LAN status. The LAN LED will light up when there is traffic passing through the LAN port.
4	**2.4G LED**	2.4G Wi-Fi status. The 2.4G LED will blink when there is 2.4G traffic.
5	**5G LED**	5G Wi-Fi status. The 5G LED will blink when there is 5G traffic.

6	**LAN1 (PoE) Port**	Offers uplink connection. This port can be used to connect to a controller, gateway, or directly to the Internet. 802.3at PoE is also supported.
7	**Ventilation Valve**	Due to extreme weather conditions, water vapor in the ECWO5213-L may condense. The valve allows ventilation to prevent moisture buildup within the ECWO5213-L.
8	**LAN2 Port**	The ports for connections with LAN side devices.
9	**Wall Mounting Holes**	For hanging ECWO5213-L.
10	**Pole Mounting Gap**	For mounting ECWO5213-L.
11	**Ground Connector**	For connecting the ground wire

Hardware Installation

Please follow the steps mentioned below to install the hardware of ECWO5213-L:

1. Place the ECWO5213-L at the best location.

The best location for ECWO5213-L is usually at the center of your intended wireless network.

Wall mount

1. Secure screws on the wall.
2. Hang ECWO5213-L on the wall by pole mounting holes.

Pole mount

1. Insert the metal strips through the pole mounting gap.
2. Join the two ends of the metal strips and adjust the length for tight fitting around the pole.

2. Connect the ECWO5213-L to your network device.

Connect one end of the Ethernet cable to the LAN1 (PoE) port of ECWO5213-L and the other end of the cable to a switch, a router, or a hub. ECWO5213-L is then connected to your existing wired LAN network.

3. Power on the ECWO5213-L.

ECWO5213-L LAN1 (PoE) port is capable of receiving DC currents. Connect an IEEE 802.3at-compliant PSE device (e.g. a PoE-switch) to the LAN1 (PoE) port of ECWO5213-L with the Ethernet cable.

Now, the Hardware Installation is complete.

> ⚠️ *To verify the wired connection between ECWO5213-L and your switch / router / hub, please also check the LED indicator of the respective network devices.*

Getting Started

Edgecore ECWO5213-L 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 ECWO5213-L 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 ECWO5213-L via an Ethernet cable. Then, set a static IP address on the same subnet mask as ECWO5213-L 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 ECWO5213-L (**http://192.168.1.10**) at the address field, and then press *Enter*.
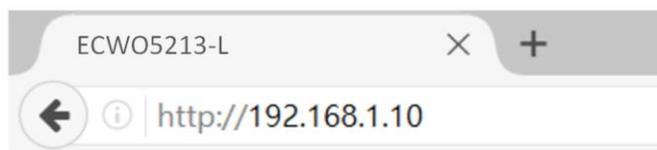
Example of entering ECWO5213-L's default IP Address via a web browser

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 ECWO5213-L's Web user interface (Web UI), a **System Overview** page of web management interface will appear, as depicted below.

Home > **Status** > System Overview

System Overview

System

System Name	ECWO5213-L
Firmware Version	3.43.00
Build Number	1.6-1.9328
Location	
Site	EN-A
Device Time	2000/01/01 00:19:47
System Up Time	0 days, 0:20:45
CPU/RAM Usage	2.01% / 38.80% Plot

Radio Status

RF Card	MAC Address	Band	Channel	TX Power
RF Card A	00:1F:D4:19:B5:64	802.11g+n	11	12 dBm
RF Card B	00:1F:D4:19:B5:65	802.11ac	36	11 dBm

LAN Interface

MAC Address	00:1F:D4:19:B5:62
IP Address	10.71.207.38
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	00:1F:D4:19:B5:64	4ipnetAP-A1	Open	0	
VAP-8	62:1F:D4:19:B5:64	EAP738_BStest	Open	0	

CAPWAP

Status	Disabled

✓ IPv6

Status	Disabled

The Web Management Interface - System Overview Page

Congratulations!

Now, Edgecore ECWO5213-L is installed and configured successfully.

⚠️ *After ECWO5213-L'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: V34320181207