KodaCloud™

OAP30 Dual Band Access Point Installation Guide
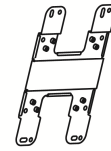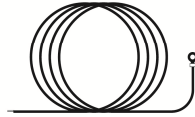
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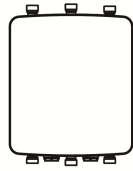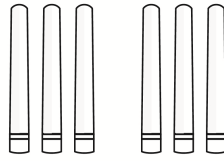
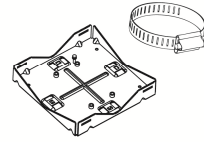|		
Access Point	2.4 GHz Detachable Antennas **x 3** 5 GHz Detachable Antennas **x 3**	Wall Mounting Kit
Ground Cable	**KodaCloud** OAP30 Outdoor Access Point Installation Guide Quick Installation Guide	Pole Mounting Kit

Step 1 - Connect the Access Point

A Connect one end of the Ethernet cable to the LAN1 Port (PoE) of the access point and the other end to the LAN + PoE (Power-over-Ethernet).

B Screw on the antennas (supplied separately) as shown in the following illustration.

C Connect the ground wire to the access point.

Note: The access point supports both IEEE 802.3at PoE (Power-over-Ethernet) supplied by a switch, or using a PoE Injector. You may use either one as the power source. DO NOT use both at the same time.
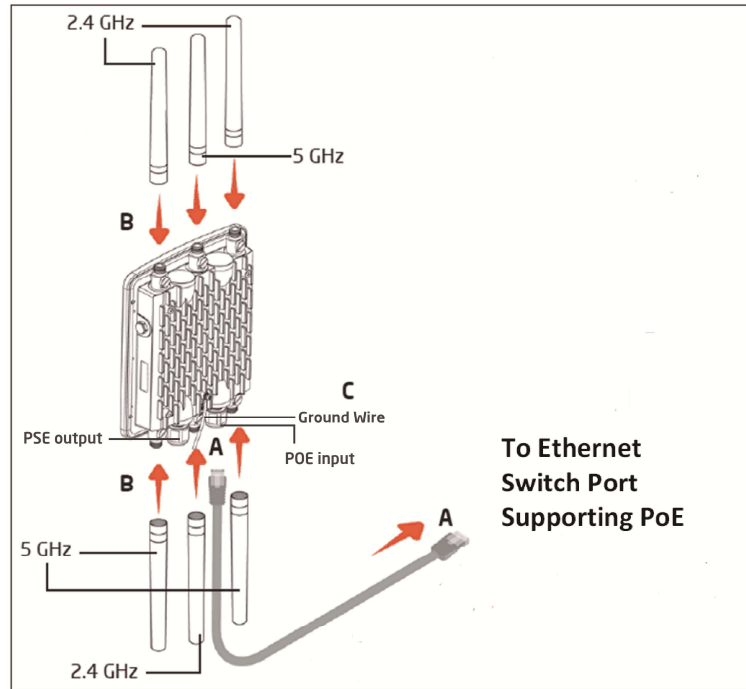
Step 2 – Mount the Access Point

Wall Mounting

A   Determine where the AP is to be placed and mark location on the surface for the four mounting holes. You may adjust the position with a level.

B   Use the appropriate drill bit to drill four 8 mm diameter and 37 mm depth holes in the markings and hammer the bolts into the openings.
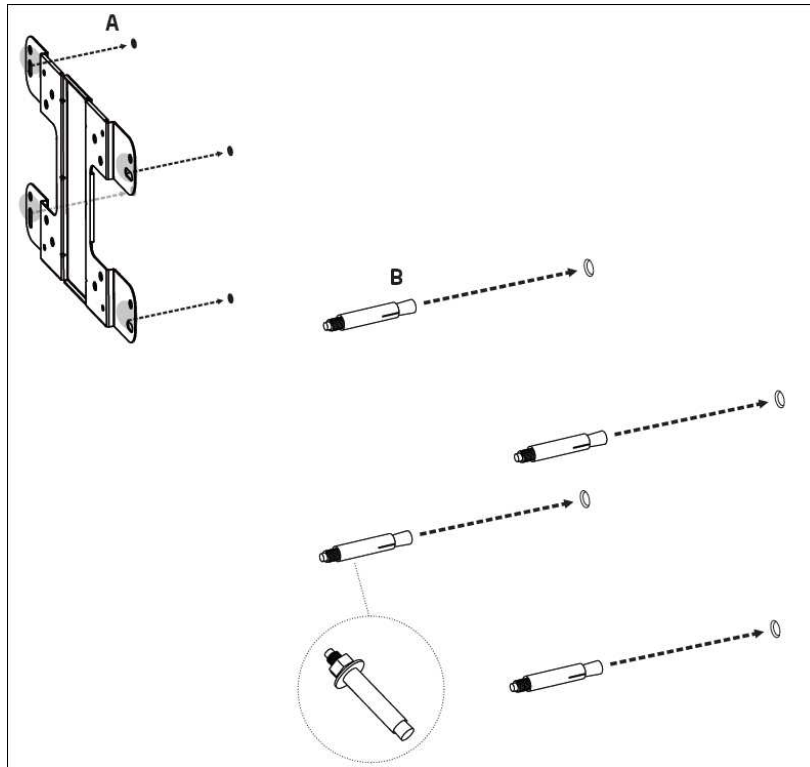
C Place the lock and flat washer on the round head screws and drive the screws to attach mounting base to the back of the access point.
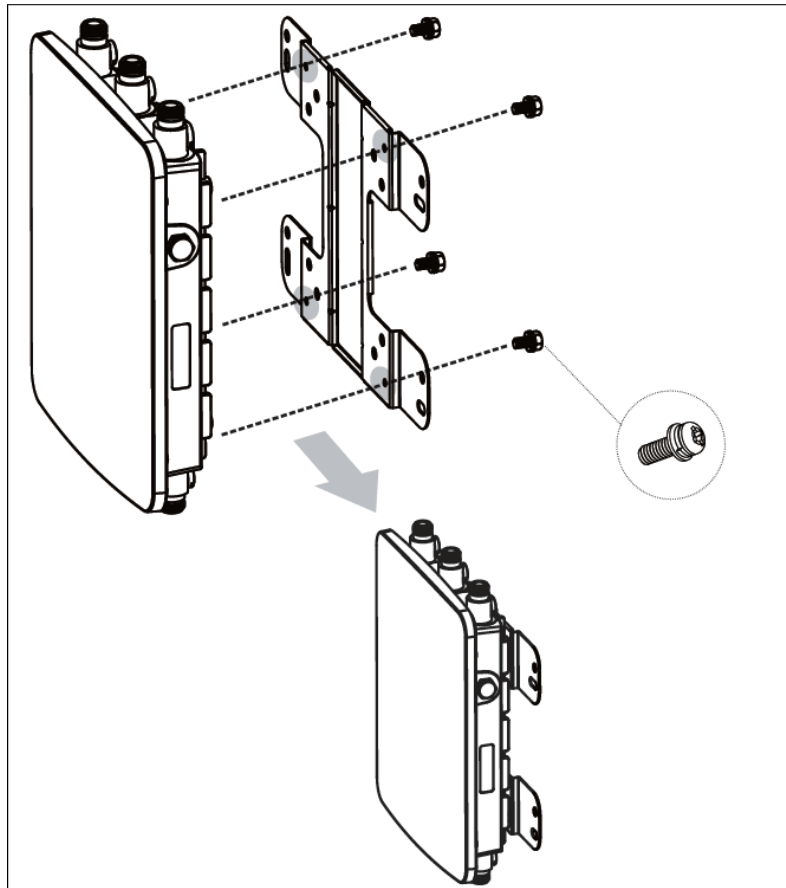
D Attach the device onto the wall by tightening the bolt's flat washers and nuts to secure the mounting base to the mounting surface. Connect the ground wire (not shown) to a grounding point.
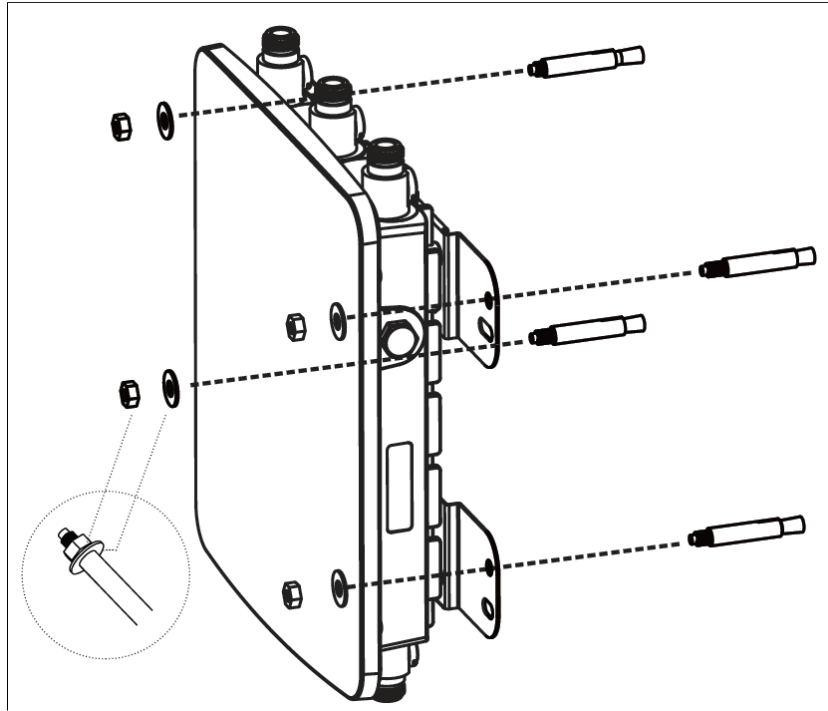
Pole Mounting

A   Place the lock and flat washer on the round head screws and drive the screws to attach the mounting base to the back of the access point.
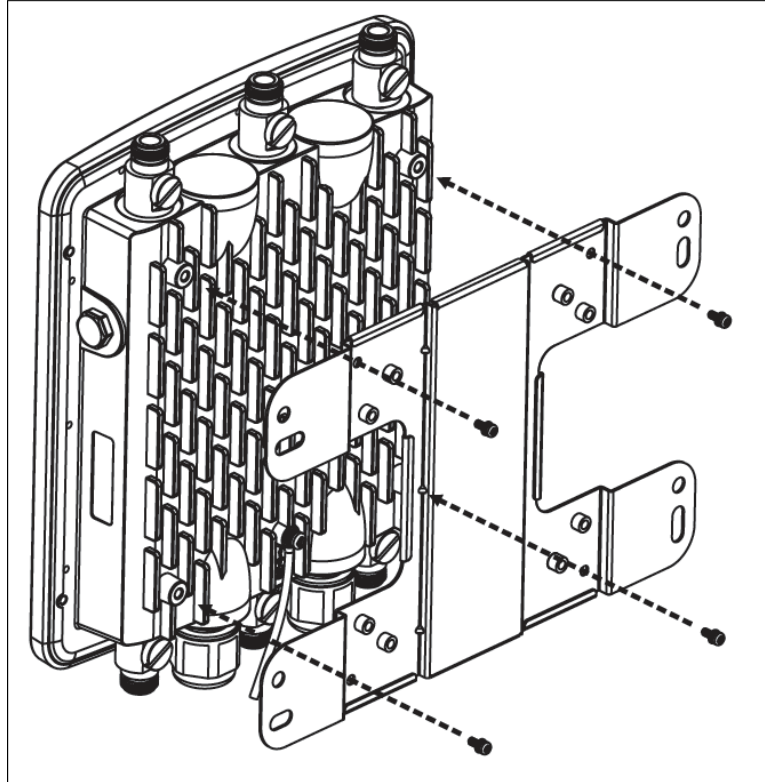
B   Determine which placement to be assembled. Drive the four round head screws to attach the pole mount bracket to the mounting base.
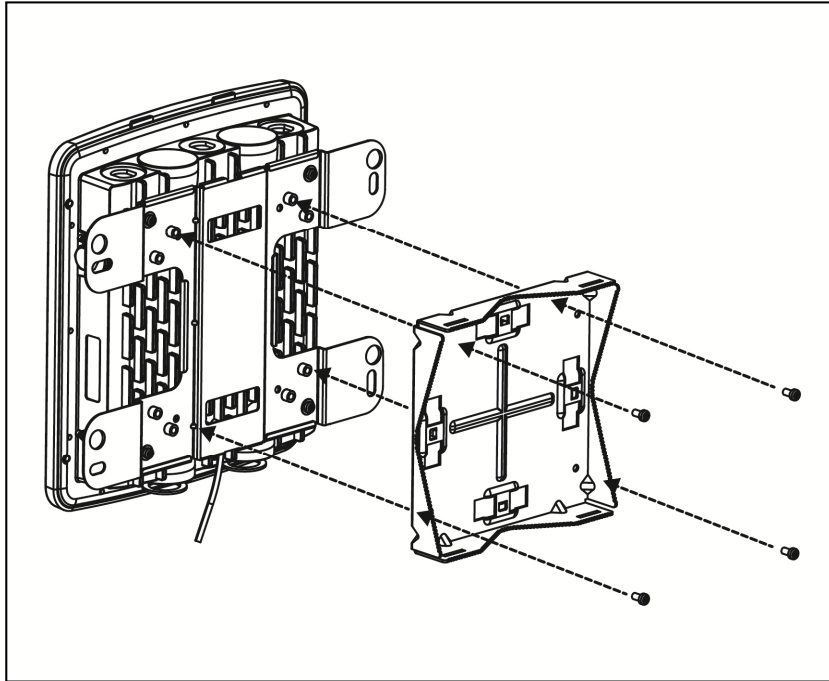
C Thread the open end of the pole strap through the two tabs on the pole mount bracket.

Horizontal Placement
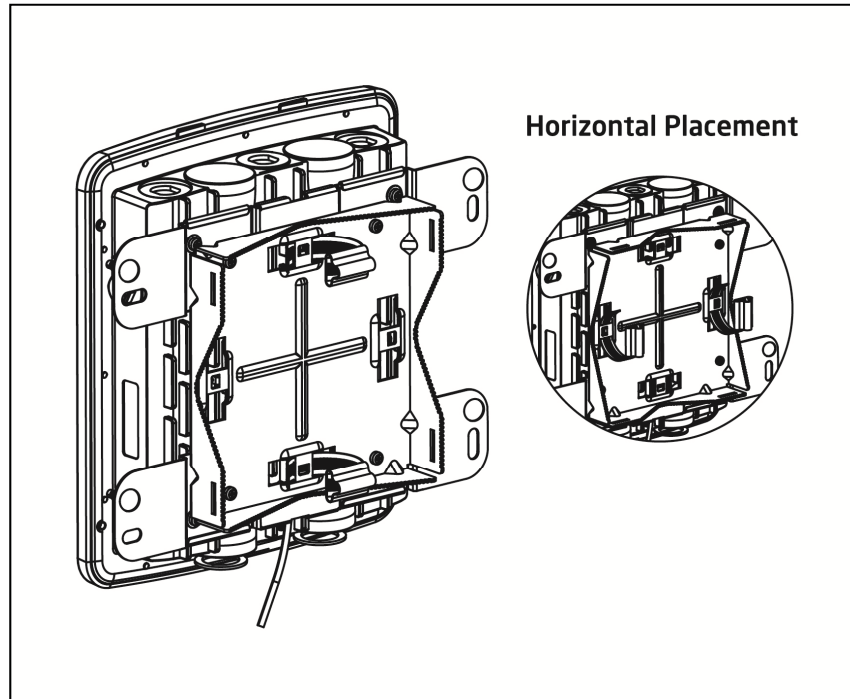
D   Determine where the AP is to be fastened. Lock and tighten pole strap to secure pole mount bracket to the pole. Connect the ground wire (not shown) to a grounding point.

Vertical Placement

Horizontal Placement
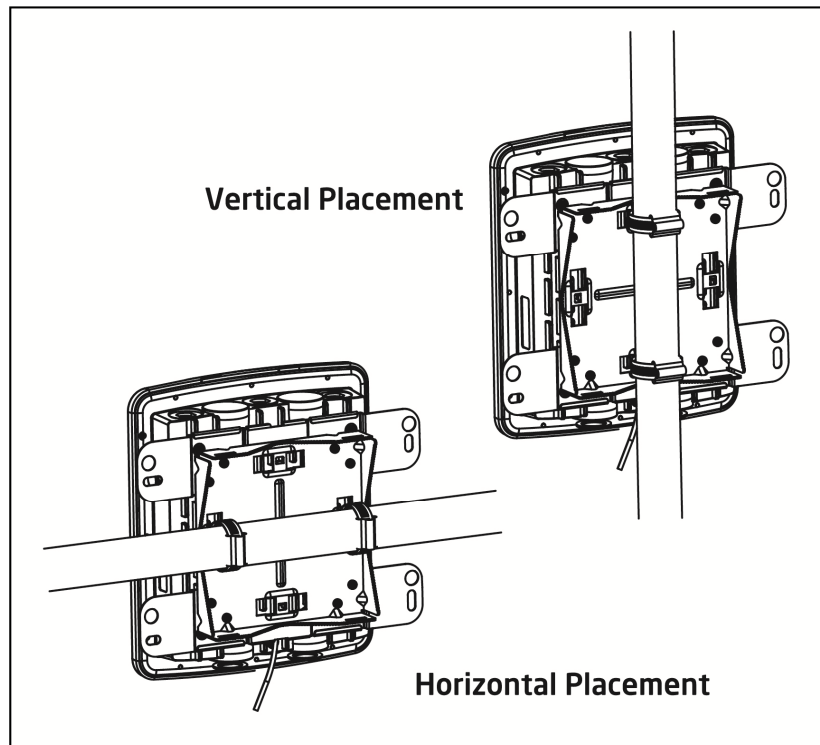
Step 3 - Verify connectivity

Verify that the OAP30 access point is connected to your network with either the KodaCloud website or the KodaCloud mobile device app.

Check the Power LED to determine whether the access point is operating correctly. The access point is properly installed and connected to the KodaCloud management services when the LED turns solid green after a few minutes.

When the access point is powered on, the Power LED should display the following sequence:

#	Power LED	Description
1	Power LED Solid Orange and all other LEDs on *(for less than 10 seconds)*	Unit has just received power and has started booting
2	Power LED Solid Orange and all other LEDs off *(for less than a few minutes)*	Unit is starting up.
3	Blinking Green *(for less than a minute)*	Access point is negotiating a connection with KodaCloud management services in the cloud.
4	Solid Green	Access point is successfully setup to be managed by KodaCloud management services in the cloud.

Note 1: The very first time the Access Point is connected, it will self-update so it will go through this sequence twice

LED	LED Description
5 GHz	Green: 5 GHz radio is active (off otherwise)
2.4 GHz	Green: 2.4 GHz radio is active (off otherwise)
LAN 2	Green: Ethernet Link on LAN2 Port (off otherwise)
LAN 1	Green: Ethernet Link on LAN1 Port (off otherwise)

Note 2: See the Tips and Troubleshooting section if the access point does not reach Solid Green. For a full description of LED Description visit the Support website (http://KodaCloud.com/support).

Step 4 - Configure the Access Point

Use your mobile device or the KodaCloud website.

Website

Sign into your account at http://KodaCloud.com and follow the instructions in the KodaCloud website to complete the process.

Mobile Device

Information about the mobile app is available at http://KodaCloud.com. The mobile device app includes instructions for completing the process.

If you have any trouble, please contact support@kodacloud.com and we'll be happy to help!

Tips and Troubleshooting

If your access point Power LED light is flashing orange and all other LEDs are off for over 10 minutes

The access point cannot connect to the KodaCloud management services. This usually occurs when the unit cannot get an IP address from your network using DHCP and has switched to Local Network Configuration mode.

While in this mode, the access point does not pass data through the LAN1 port and broadcasts an SSID that contains a portion of the access point's MAC address. You can use any Wi-Fi enabled device to connect to this SSID and configure the network settings for this access point using a web browser.

To connect to the access point using the Local Network Configuration interface:

1. Connect your Wi-Fi enabled device to the SSID in the form of "AP-*XX:XX:XX*" (where X is a placeholder)). You are successfully connected when the Power LED on the access point becomes solid red.
2. Use your web browser to navigate to http://192.168.100.1 (login using user: admin, password: admin).
3. Follow the on-screen instructions

See the Support section (http://kodacloud.com/support) for information about Local Network Configuration.

Note: Local Configuration mode only activates if the access point is in factory default condition and has never connected to the KodaCloud management services in the cloud.

Learning More, Service, and Support

Online Resources

Our support website (http://kodacloud.com/support) contains links to online resources available to help you get the most out of your access point.

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Open Source Code

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OAP30 Specifications and Safety Guidelines

Specifications:
Frequency Bands: Programmable for different country regulations
Radio 1 – 2.400 to 2.484 GHz
Radio 2 - 5.150 – 5.250 GHz, 5.725 – 5.850 GHz

Standards: Radio 1 2.4G IEEE 802.11 b/g/n, Radio 2 5G IEEE 802.11 a/n/ac
Input voltage and current: 54VDC @ 1.2A

Interfaces:
RJ-45 for 10/100/1000 Gigabit Ethernet
2nd RJ45 port support 802.3af (15.4W) PSE
6 N-Type connector

Environmental Specifications:
Operating Temperature: -40℃ to 60℃
Storage Temperature: -40℃ to 70℃ (-40°F to 158°F)
Humidify: 5% ~ 90% typical (non-condensing)

Antenna Specifications:
Antenna: N-type Dipole
Peak Gain: 4.5 dBi @ 2.4 GHz / 6 dBi @ 5 GHz

Caution:
Safety caution: The unit should be connected to PoE networks only, without routing to the outside plant.

Regulatory Compliance Information

FCC

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. See 47 CFR 1.80.

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.

IMPORTANT NOTE:
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 31cm between the radiator and your body.

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

There is no Country Code selection capability for USA Part # OAP30-UC.

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 31cm 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.

4. Installation procedure
Please refer to user's manual 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.

Instructions d'installation professionnelle
1. Installation
Ce produit est destine a un usage specifique et doit etre installe par un personnel qualifie maitrisant les radiofrequences et les regles s'y rapportant. L'installation et les reglages ne doivent pas etre modifies par l'utilisateur final.

2. Emplacement d'installation
En usage normal, afin de respecter les exigences reglementaires concernant l'exposition aux radiofrequences, ce produit doit etre installe de facon a respecter une distance de 31 cm entre l'antenne emettrice et les personnes.

3. Antenn externe.
Utiliser uniiquement les antennes approuvees par le fabricant. L'utilisation d'autres antennes peut conduire a un niveau de rayonnement essentiel ou non essentiel depassant les niveaux limites definis par FCC, ce qui est interdit.

4. Procedure d'installation
Consulter le manuel d'utilisation.

5. Avertissement
Choisir avec soin la position d'installation et s'assurer que la puissance de sortie ne depasse pas les limites en vigueur. La violation de cette regle peut conduire a de serieuses penalites federales.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux CNR exemptes de licence d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes: (1) Ce dispositif ne peut causer d'interférences; et(2) Ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

Caution:
(i) The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
(ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
(iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
(iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:
(i) Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
(ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;
(iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
(iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 35 cm between the radiator & your body.

Déclaration d'exposition aux radiations:
Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 35 cm de distance entre la source de rayonnement et votre corps.

FC   c (UL) us LISTED I.T.E. E206448   2002/95/EC RoHS COMPLIANT   ICES-003 issue 5 (2013/08/01) CAN ICES-3(*)/NMB-3(*) [*] = Class A or B

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 35 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 ISED limit and is prohibited.

4. Installation procedure
Please refer to user's manual 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.
Instructions d'installation professionnelle

1. Installation
Ce produit est destine a un usage specifique et doit etre installe par un personnel qualifie maitrisant les radiofrequences et les regles s'y rapportant. L'installation et les reglages ne doivent pas etre modifies par l'utilisateur final.

2. Emplacement d'installation
En usage normal, afin de respecter les exigences reglementaires concernant l'exposition aux radiofrequences, ce produit doit etre installe de facon a respecter une distance de 35 cm entre l'antenne emettrice et les personnes.

3. Antenn externe.
Utiliser uniiquement les antennes approuvees par le fabricant. L'utilisation d'autres antennes peut conduire a un niveau de rayonnement essentiel ou non essentiel depassant les niveaux limites definis par ISED, ce qui est interdit.

4. Procedure d'installation
Consulter le manuel d'utilisation.

5. Avertissement
Choisir avec soin la position d'installation et s'assurer que la puissance de sortie ne depasse pas les limites en vigueur. La violation de cette regle peut conduire a de serieuses penalites federales.

DETACHABLE ANTENNA USAGE
This radio transmitter (IC: 12659A-OAP30 / Model: OAP30) has been approved by ISED to operate with the antenna type listed below with maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.
Le présent émetteur radio IC: 12659A-OAP30 / Model: OAP30pprouvé par ISED pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.
Approved antenna(s) list

Type	Gain	Brand	Manufacturer
Dipole(2.4G)	4.5dBi	Senao	Senao Networks, Inc.
Dipole(5G)	6.0 dBi	Senao	Senao Networks, Inc.