

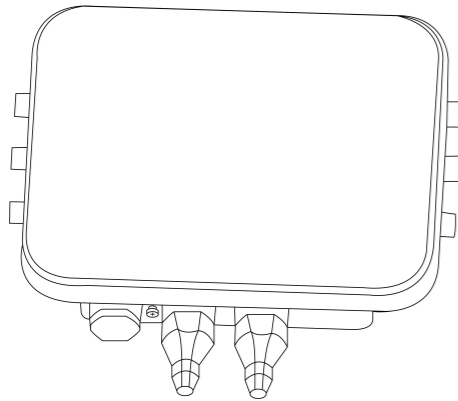


# Quick Start Guide

## Outdoor Access Point

### 1. Products overview

The outdoor AP device is designed for outdoor applications and meets outdoor installation requirements. The protection class is IP67. It is waterproof, dustproof, lightning proof, and anti-aging. It can be used in various complicate environments. Outdoor AP device appearance as shown below:



- Design for outdoor applications and adapted to harsh outdoor work requirements.
- Ultra-wide working temperature: -40 °C ~ 65 °C.
- High level of protection standard: IP67, excellent waterproof and dustproof performance.

### 2. Products installation

The installation of outdoor AP includes the installation of structural components, signal lines (network cables), grounding lines, and placement of antenna feeders. Outdoor AP installations are pole-mounted and wall-mounted.

#### 2.1 Outdoor Environmental Inspection Requirements

In order to ensure that the outdoor AP is in a good state of operation for a long period of time, the system must be placed in the specified operating environment. The devices should avoid places where there are often large vibrations or strong noise, and try to stay away from step-down substations and traction substations.

Project	Inspection requirements
<b>Environmental Requirements</b>	<ul style="list-style-type: none"> <li>* Operating temperature: -40 °C ~ 65 °C</li> <li>* Operating Humidity: 0% to 95% (non-condensing)</li> <li>* Waterproof standard: IP67</li> <li>* Wind speed requirement: &lt;250Km/h</li> </ul>
<b>Location</b>	<ul style="list-style-type: none"> <li>* The location should not be in an environment with high temperature, harmful gas, flammable, explosive, electromagnetic interference (large radar stations, transmitting stations, substations) and unstable voltage; it should avoid frequent large vibrations and strong noises. Keep away from various sources of pollution. Therefore, in the engineering design, according to the communication network planning and technical requirements of communication equipment, considering the hydrology, geology, earthquake, electricity, traffic and other factors, select the address that meets the design requirements of the communication equipment engineering environment.</li> <li>* It is not recommended to install near a beach. The distance between the chassis and the sea is more than 500m.</li> <li>* Avoid installation in easy-water areas. It is recommended to install on cement steps or high ground.</li> </ul>
<b>Earthing Resistance</b>	<ul style="list-style-type: none"> <li>*The earthing resistance should be less than 5 ohms; for areas where the annual thunderstorm is less than 20 days, the grounding resistance can be less than 10 ohms.</li> <li>*The upper end of the grounding body should be no less than 0.7m above the ground, and the grounding body in the cold area should be buried below the frozen soil.</li> </ul>
<b>Grounding Lead</b>	<ul style="list-style-type: none"> <li>*The length of the grounding lead-in wire should not exceed 30m, and its material should be galvanized flat steel with a cross-sectional area of 40mm x 4mm or 50mm x 5mm.</li> </ul>
<b>Prevent Lightning Strike</b>	<ul style="list-style-type: none"> <li>*In the plain area, the lightning rod protection angle of the antenna should be less than 45°. In the mountains and Dora regions, the lightning rod protection angle of the antenna should be less than 30°, and its lightning protection ground (grounding of the lightning rod and other devices) should be connected to the protection ground of the chassis. Share a group of grounding bodies.</li> <li>*Antenna lightning protection: In the antenna-to-equipment line, a suitable antenna lightning protection device must be installed, and the grounding line of the antenna lightning protection device must be connected to the equipment.</li> <li>*Signal (network cable) lightning protection (standard equipment internal configuration): In the network cable from the device to the ground line, must install a suitable signal (network port) lightning protection device, and the signal (network port) lightning protection device grounding line Connect effectively to the device.</li> <li>*The whole machine is grounded: the cross-sectional area of the grounding line is not less than 4 mm<sup>2</sup>, and the grounding resistance is not more than 1Ω. The grounding wire is effectively connected to the grounding body to achieve a reliable grounding of the equipment.</li> </ul>

### 2.2 Installation Tools

For outdoor AP equipment installation and commissioning, different tools and instruments need to be prepared at different stages. Prepare tools and instruments in advance to avoid delays at the worksite.

Tool type	Outdoor installation
Universal Tools	Adjustable Wrench, Vise, Phillips Screwdriver, Socket, Clipper, Steel tape measure, marker pen, impact drill
Special tools	Stripping pliers, crimping pliers, waterproof mastic, waterproof tape, insulating tape.
Auxiliary tools	ladder

Description: The company does not provide installation tools, users need to increase or decrease the corresponding tools according to the actual installation and construction conditions.

### 2.3 Prepare the Material

Outdoor AP product standard accessories and optional accessories see Product Manual. However, engineering materials and related products need to be prepared separately.

The project materials are as follows:

Name	Detail	Note
Screws	Determine the quantity according to site conditions	
Ground wire	Determine the length according to site conditions	

### 2.4 Install of outdoor AP

The device of outdoor AP support pole mounts and wall mounts.

\* Description: Side or flip mounting is strictly prohibited.

#### 2.4.1 Pole Mounting

\* Description: This manual only describes the erection pole installation method.

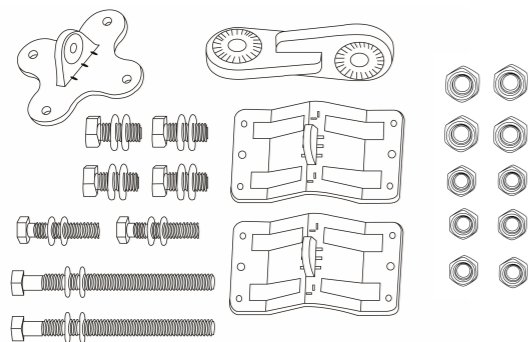
##### 2.4.1.1 Optional Installation Kit

Before installing the device, firstly according to the thickness of the pole, choose the standard or customize the appropriate size of the installation kit, according to different customer needs, the way the pole is divided into all aluminum alloy bracket kit and aluminum alloy bracket + steel strap kit Two modes.

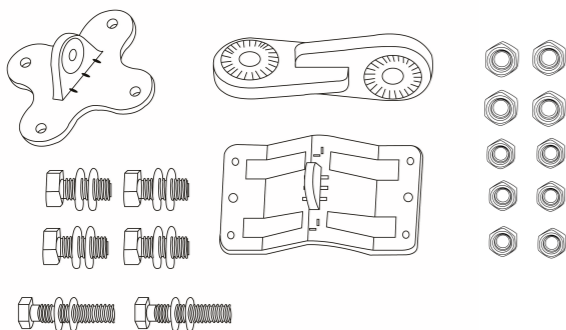
(1) All aluminum alloy bracket kit, suitable for the outside diameter of the holding pole should be between 40mm ~ 80mm.

(2) Aluminum alloy bracket + steel band hoop kit, suitable for the outside diameter of the holding pole should be between 60mm ~ 110mm. The outline of the mounting kit configured with the host device is shown in the figure below.

The configuration of the mounting kit with the main device is shown in the below.



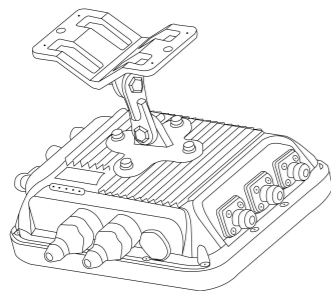
(1) All aluminum alloy bracket kit



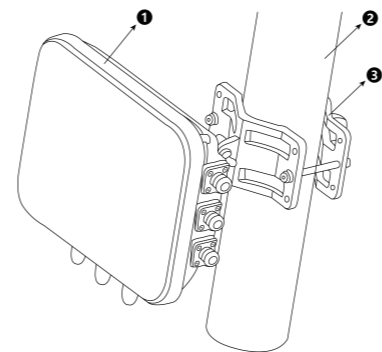
(2) Aluminum Alloy Bracket + Steel Band Hoop Kit

#### 2.4.1.2 Assembly of the Pole Mounting Kit

The device must be assembled before installing the pole. As shown below:



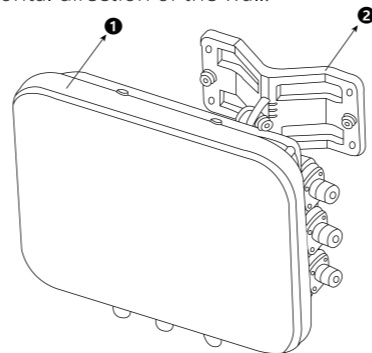
(1) The illustration of the all-aluminum bracket assembly after it is mounted on the pole:



(1) VAP (2) Holding pole (3) Pole Mounting Kit

#### 2.4.1.3 Installing an AP on a Wall

If you need to install the AP device on the wall, you need to use expansion bolts. Please prepare by yourself: flat washers, spring washers, nuts, and 2pcs expansion bolts (6\*60 or 6\*80). Draw the position marks of two bolt holes with a relative distance of 121 mm in the horizontal direction of the wall.



(1) VAP (2) All-aluminum bracket kit (3) Wall surface

#### Suggest:

The deployment of the ground wire will effectively guarantee the performance and safety of the device. It is recommended to place the system ground wire as far as possible according to the regulations when the conditions permit.

#### Warning:

All network ports, regardless of whether external cables are connected, must be waterproofed in strict accordance with the regulations. At the joints, first wrap each joint with insulating waterproof adhesive tape, and then use waterproof tape to wrap it again to ensure waterproof effect. If the water is not treated according to the regulations, it will cause the water to enter the device.

## The Initial Configuration of VAP

When the VAP is connected to a DHCP network it will automatically obtain an IP address and discover the AC through broadcast. In general local applications, we do not need to specify the Local AC IP address for the VAP; on the other hand, we can also specify the Local AC/Central AC IP address for the VAP, and in certain environments (AP to AC cross-NAT), we have to specify the Local AC/Central AC IP address for the VAP.

The initial configurations of VAP are as shown below:

- When the VAP is powered up it will by default broadcast the SSID "abloomy\_mac", as shown below: `Abloomy_60:cd:a9:00:16:4d`
- Connect your laptop to the SSID and manage the VAP through SSH (use SSH software like Xshell), the management ip is 10.0.0.1, as shown below: `[c:\~]$ ssh 10.0.0.1`  
Also access `http://10.0.0.1:9000` from the browser
- Follow the prompts to enter username: `admin` and password: `admin`. After login successfully, type "shell" at the command line and press enter, use the following command to specify the remote Central AC/Local AC IP (for example:192.168.100.21) address for the VAP: `Abloomy> set csip 192.168.100.21`

Have the VAP connected to the network after the completion of the above steps. Detailed configuration of WLAN, Radio and so on should be configured on the graphical page of Local AC/Central AC.

## Online Resources

Please log in [www.abloomy.com](http://www.abloomy.com) to get the technical documents, or contact our technical engineer by email([service@abloomy.com.cn](mailto:service@abloomy.com.cn)). Before you send it, Please contact our Service to make sure malfunction of devices and warranty period first, Service Tel: +001-888-690-7008

We will publish the new products and software on our official website in the first time.

## Abloomy Technologies Inc.

Headquarters: 21423 SHANNON CT, CUPERTINO, CA 95014, USA

Branch: 3rd Floor, CST Building, A1 Beishatan, Chaoyang District, Beijing, P.R.China

Toll Free Number: +001-888-690-7008

Website: [www.abloomy.com](http://www.abloomy.com)

E-mail: [abloomy@abloomy.com](mailto:abloomy@abloomy.com)