



Package content



dish



main arm



Stabilizer Arms (Qty: 2)



Mounting bracket



Screw



u clamp



Flat Washers (Qty: 2)



Lock Washers (Qty: 2)



Flange Nuts (Qty: 2)



Gigabit PoE (24V, 0.5A) with mounting bracket



Power cord

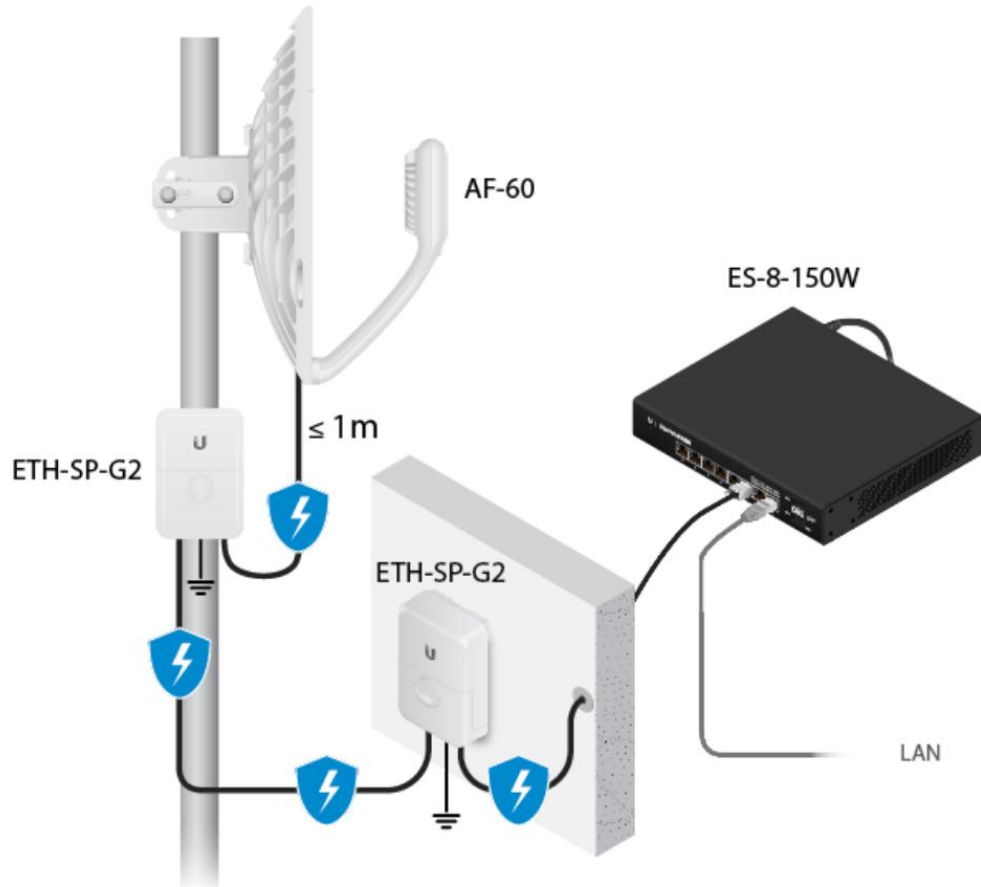
installation requirements

- Clear line of sight between airFiber access point and station
- It must be installed without obstacles in the upper part, for the correct operation of the GPS
- Vertical Mounting Orientation
- mounting point:
 - At least 1 m below the highest point of the structure
 - For installation on towers, at least 3 meters below the top of the tower
- Category 6 (or higher) shielded cabling and RJ45 shielded connectors are required for all Ethernet cable connections.

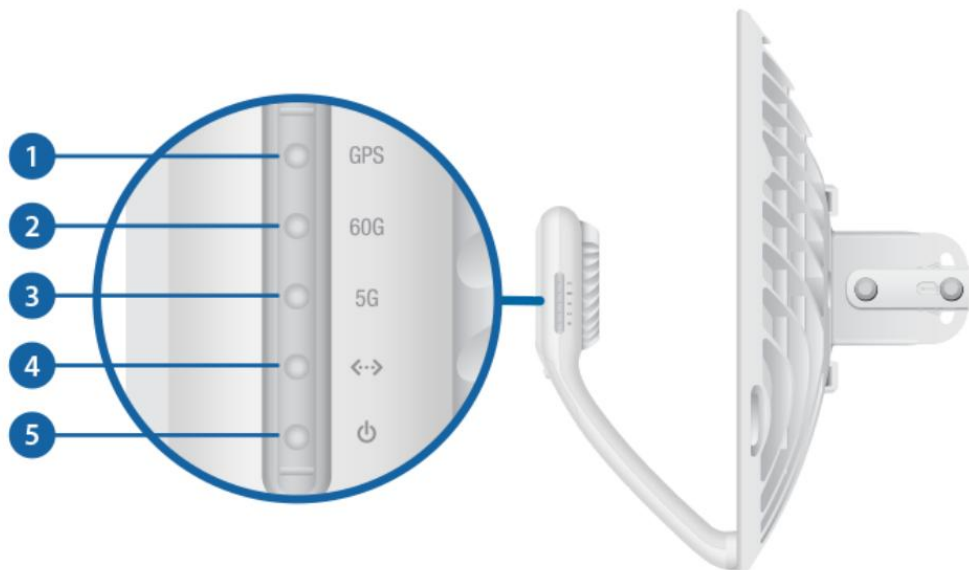
SP-G2), one near the airFiber radio and one at the entry point of the building. The ETH-SP-G2 will absorb surge voltages and safely discharge them to the ground.



Note: For guidelines on grounding and lightning protection, follow local electrical regulation codes.



Device overview





1 GPS LED	
Blue	The LED will light blue when the GPS signal strength is sufficient. Requires a minimum of three GPS satellite connections.
2 60G LED	
Blue	The LED will light blue when the 60 GHz link is ready.
3 LED the 5G	
Blue	The LED will light blue when the 5GHz link is ready.
4 LED the LAN	
Blue	The LED indicator will be solid blue when the device is connected to an Ethernet network through the Ethernet port and will blink if there is activity.
5 Power LEDs	
flashing white	Startup in progress.
White	Ready to use, not connected to the Ubiquiti® Network Management System (UNMS™). See “UNMS Management” .
Blue	Ready to use, connected to the UNMS.
Steady blue with occasional flicker	Out of the box, unable to connect to UNMS, check connection to UNMS server.
fast blue flashing	It is used to locate a device in the UNMS.
Alternation between blue and white	Firmware update in progress.
6 PoE IN	
Gigabit Ethernet PoE port to manage user traffic and power the	

7 Reset button

To restore factory defaults, press and hold the Reset button for more than 10 seconds while the device is powered on. You can also remotely reset the device using the reset button on the bottom of the Gigabit PoE adapter.

Installation overview

We recommend that you configure both airFiber radios (access point and station) prior to installation. Follow the instructions available in "[Configuration](#)" (Settings) for each radio.

Setting

Power over Ethernet connection

1.



2.



3.



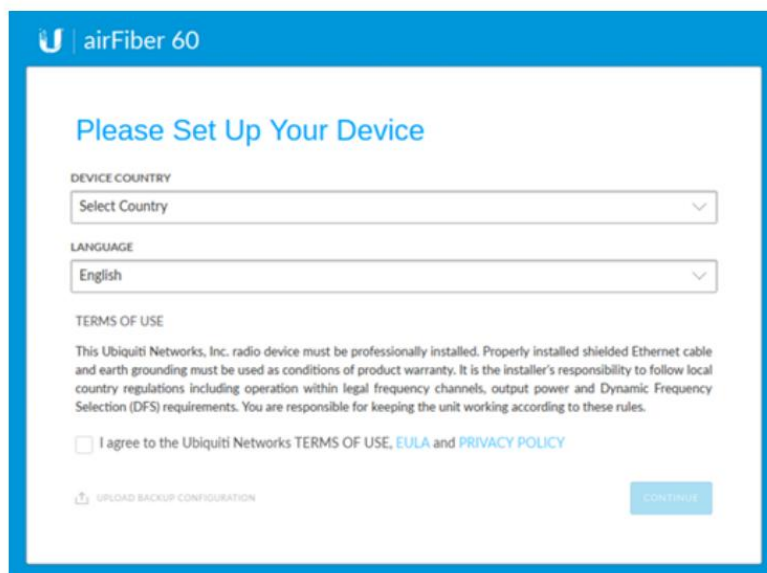
Configuring the settings

The device is set to DHCP by default, so it will attempt to obtain an IP address automatically. If this fails, it will use the default fallback IP address: 192.168.1.20. Go to the appropriate section: "[DHCP](#)" or "[Fallback IP Address](#)" :

DHCP

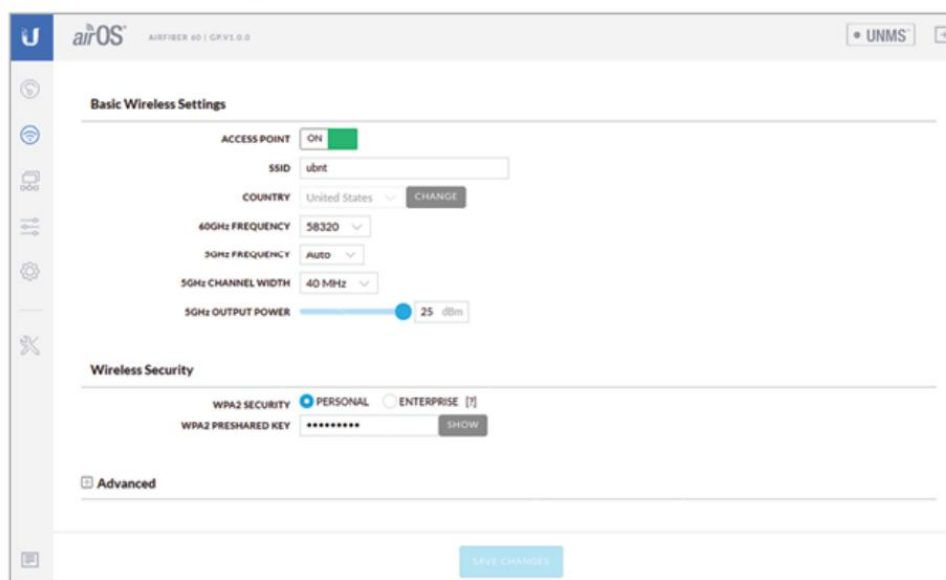
Use one of the following methods:

- Configure the DHCP server to provide a specific IP address to the device based on its MAC address (on the label).
- Let the device obtain an IP address, and then check the DHCP server for the IP address that has been assigned.
 1. Launch the web browser. Type the correct address in the address field. Press Intro (PC) or Return (Mac).
 2. Select your language and country. You must accept the Terms of Use to use the product. Click Continue.



3. Enter a username and password, confirm the password, and click Save.

4. Click on the icon. 



5. Set the following options:

- a. Enable Access Point mode on one of the airFiber radios. Leave the access point disabled on the other airFiber radio (the station).

b. Enter a name in the SSID field. It must be the same in both point access as in the station.

- c. In the WPA2 Preshared Key field, enter a combination of alphanumeric characters (0-9, AZ, or az).



Note: The key is an alphanumeric password between 8 and 63 characters.

6. Click Save Changes.

7. Configure each of the airFiber radios with a unique IP address:

- a. Click on the icon. 

- **DHCP:** By default, the DHCP client setting is enabled; if there is a DHCP server on your network, the airFiber radio will obtain its address through DHCP.



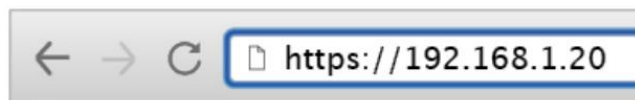
Note: If the DHCP client configuration fails, the device will use the backup IP address: 192.168.1.20

- **Static IP** – You can disable the DHCP client setting and use a static IP address.

c. Click Save Changes.

Backup IP address

1. Make sure your computer (or other host system) is connected to the same LAN as the airFiber radio.
2. Configure the Ethernet adapter on your host system with a static IP address on the 192.168.1.x subnet.
3. Launch the web browser. Type `https://192.168.1.20` in the address field and press Intro (PC) or Return (Mac).



4. Select your language and country. You must accept the Terms of Use to use the product. Click Continue.

airFiber 60

Please Set Up Your Device

DEVICE COUNTRY
Select Country

LANGUAGE
English

TERMS OF USE
This Ubiquiti Networks, Inc. radio device must be professionally installed. Properly installed shielded Ethernet cable and earth grounding must be used as conditions of product warranty. It is the installer's responsibility to follow local country regulations including operation within legal frequency channels, output power and Dynamic Frequency Selection (DFS) requirements. You are responsible for keeping the unit working according to these rules.

I agree to the Ubiquiti Networks TERMS OF USE, EULA and PRIVACY POLICY

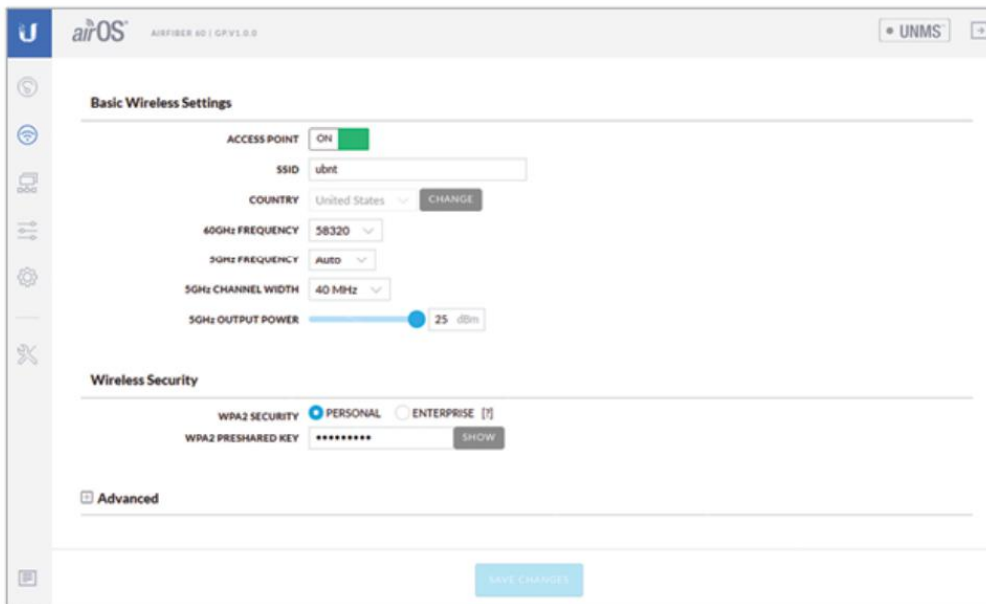
UPLOAD BACKUP CONFIGURATION

CONTINUE

5. Enter a username and password, confirm the password, and click Save.

6. Click on the icon.





7. Set the following options:

- to. Enable Access Point mode on one of the airFiber radios.
Leave the access point disabled on the other airFiber radio (the station).
- b. Enter a name in the SSID field. It must be the same at both the point of access as in the station.
- c. In the WPA2 Preshared Key field, enter a combination of alphanumeric characters (0-9, AZ, or az).



Note: The key is an alphanumeric password between 8 and 63 characters.

8. Click Save Changes.

9. Configure each of the airFiber radios with a unique IP address:

- to. Click on the icon . b.

Check your network settings to ensure that each airFiber radio has a unique IP address. The IP address of each radio can be obtained through DHCP or a static IP address can be used.

- **DHCP:** By default, the DHCP client setting is enabled; if there is a DHCP server on your network, the airFiber radio will obtain its address through DHCP.
- **Fallback IP** – If you use fallback IP address on one radio, you must change the IP address configuration of the other radio. The backup IP address is: 192.168.1.20

c. Click Save Changes.

UNMS Management

You can manage the device through the UNMS, which allows you to configure, monitor, update and back up your devices through a single application. To get started, go to www.unms.com

Installation

1.

2.



3.

Opcional

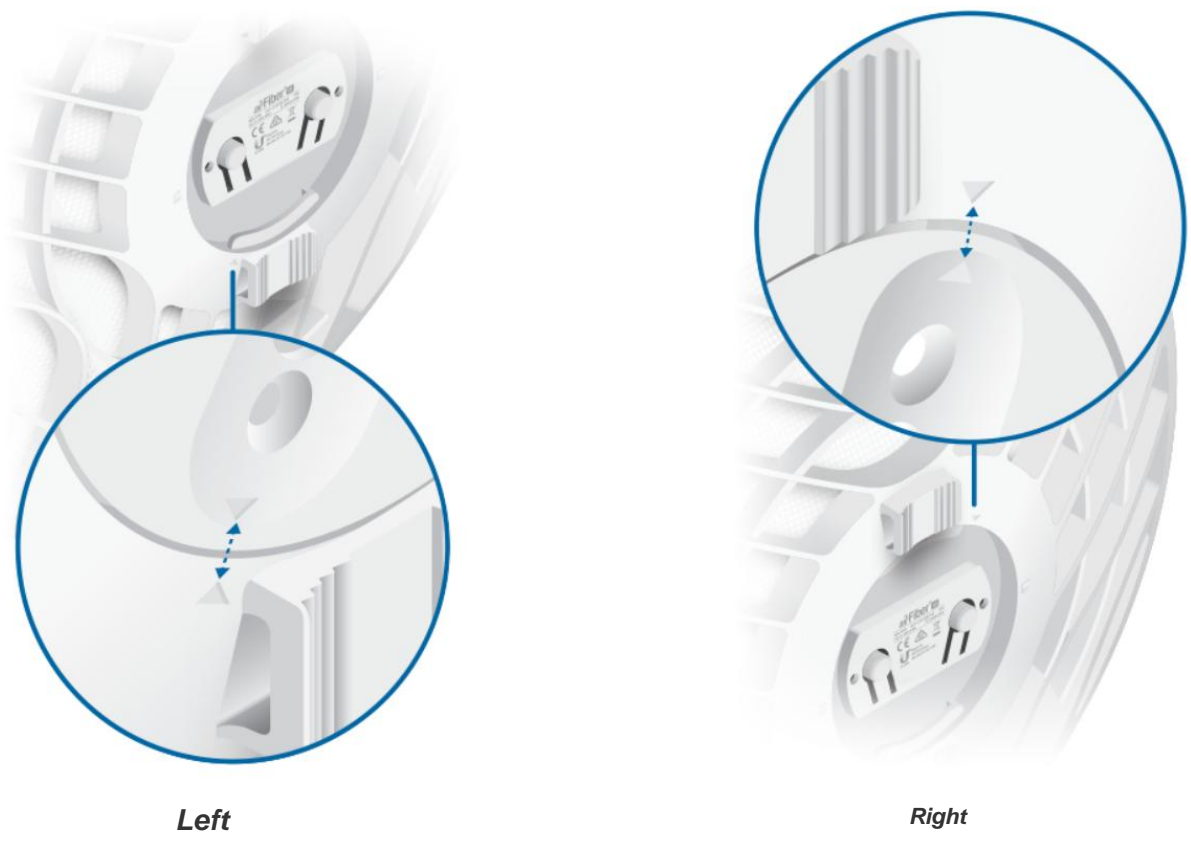
Fije los brazos del estabilizador para obtener una sujeción adicional.
(Se recomienda para instalaciones de largo alcance.)



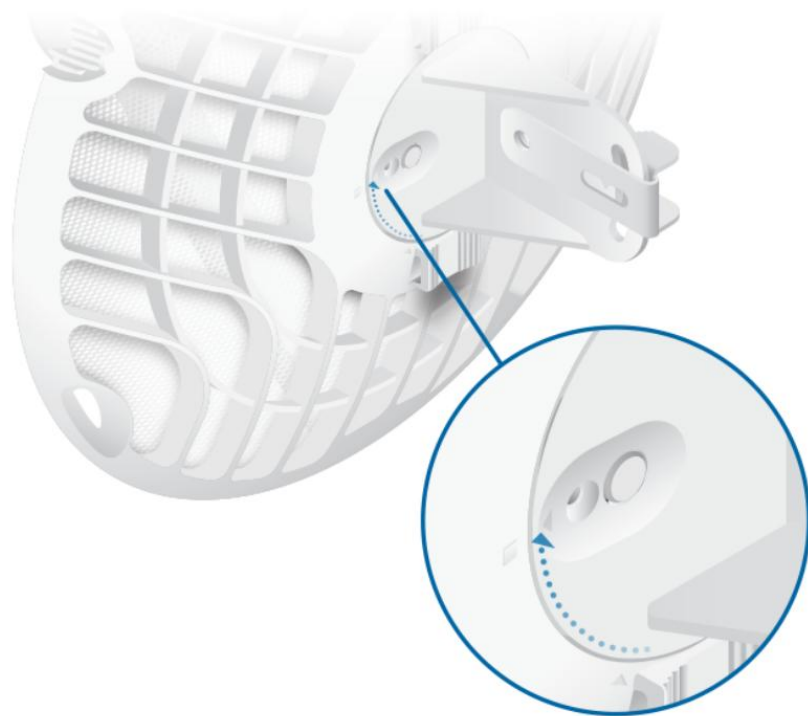
4.



Note: The AF60 can be installed on either side of the pole. This section shows the AF60 installed on the left side; the procedure for its mounting on the right side is similar.

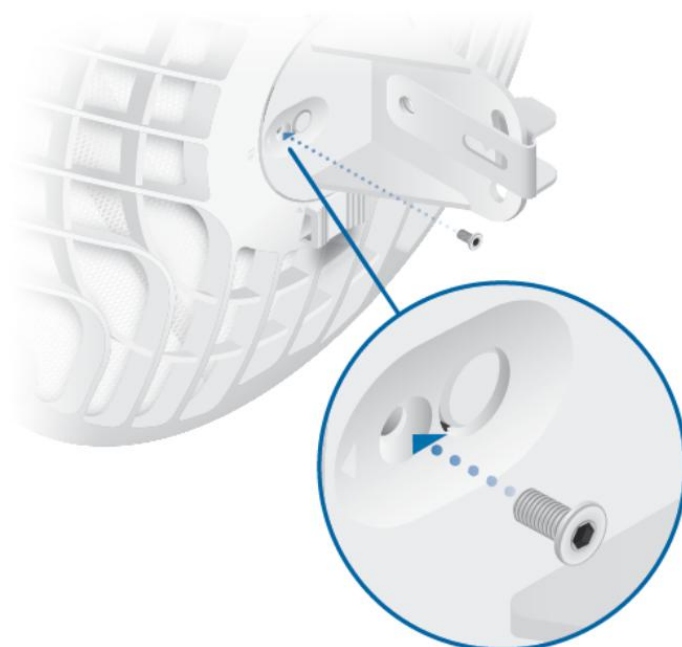


5.



Note: Rotate the mounting bracket clockwise until it clicks into position.

6.



7.



8.



(Post not shown)

9.



10.



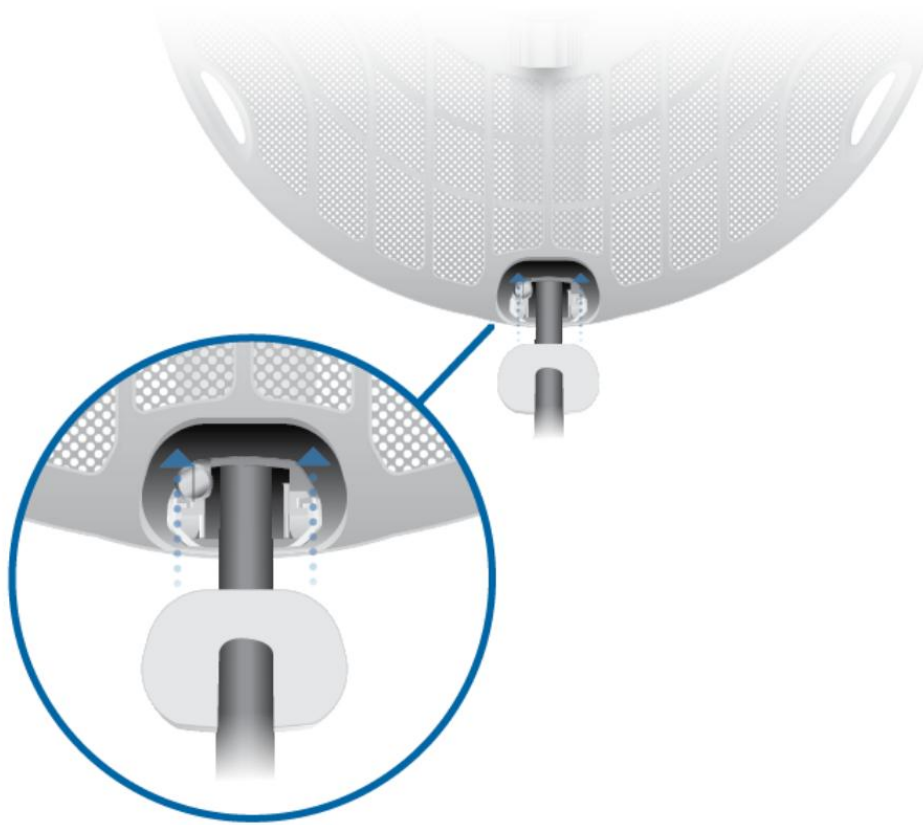
11.



12.

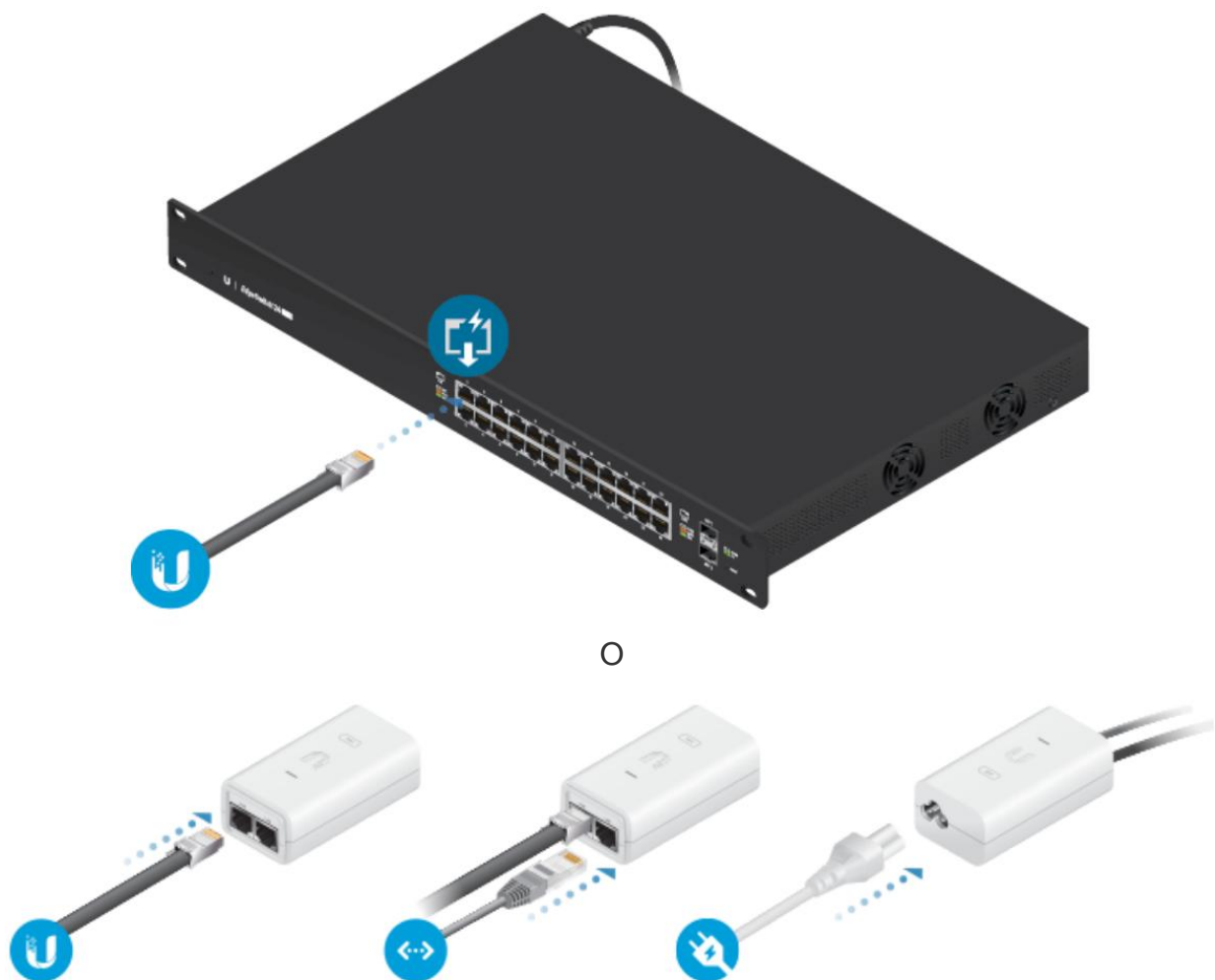


13.

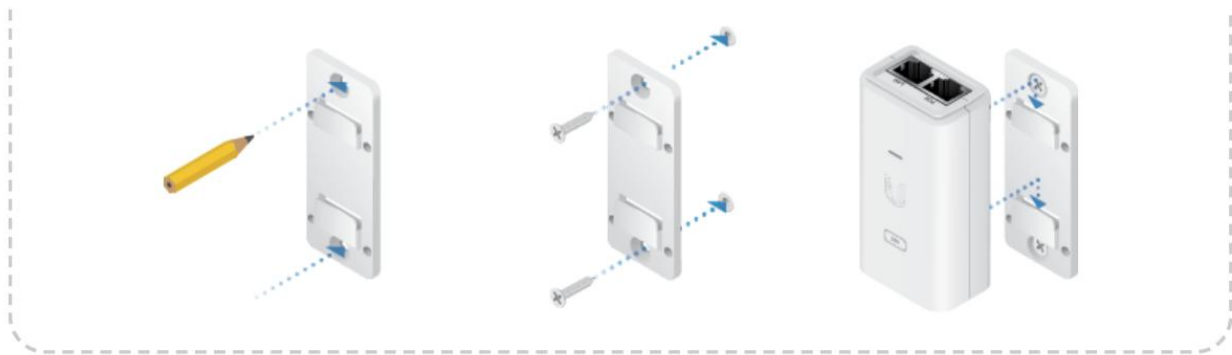


Power connection

! **WARNING:** The switch port must meet the power specifications listed in the “Specifications” section. (Specifications).



Optional



Alignment

Tips

- To accurately align airFiber devices to optimize performance, you **MUST** align only one end of the link at a time.
- You may need to use additional tools to compensate for issues such as improper orientation of a mounting post or significant elevation differences between the two airFibers.

Establishing a link

Adjust the orientation of the access point and the station to establish a link.



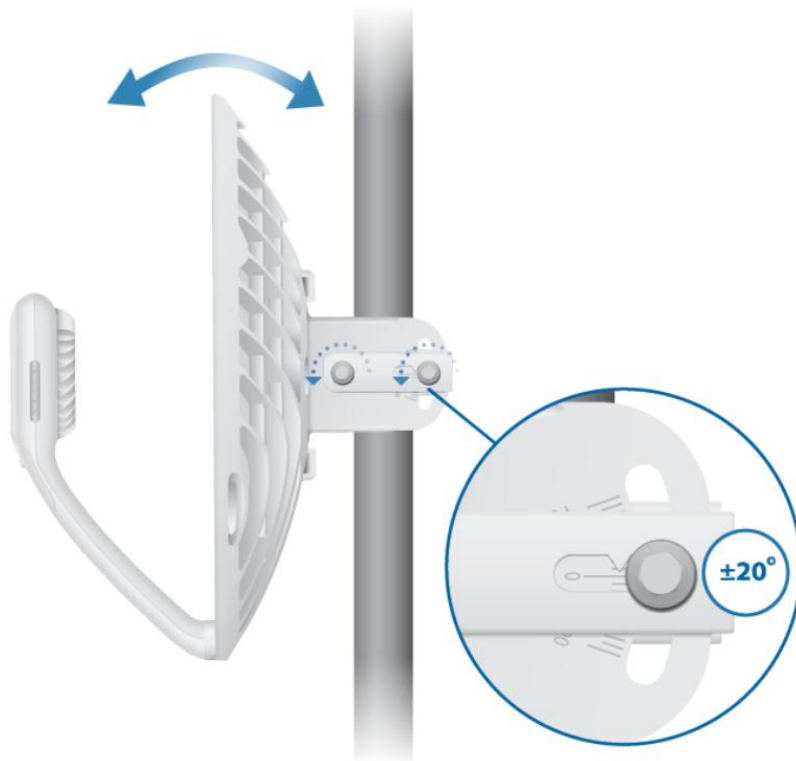
Note: The access point must first face the station because the station does not transmit RF signals until it detects transmissions from the access point.

1. **Access Point:** Visually orient the access point towards the station by loosening the flange nuts on the mounting bracket to allow adjustment of azimuth and elevation.

Azimuth adjustment:

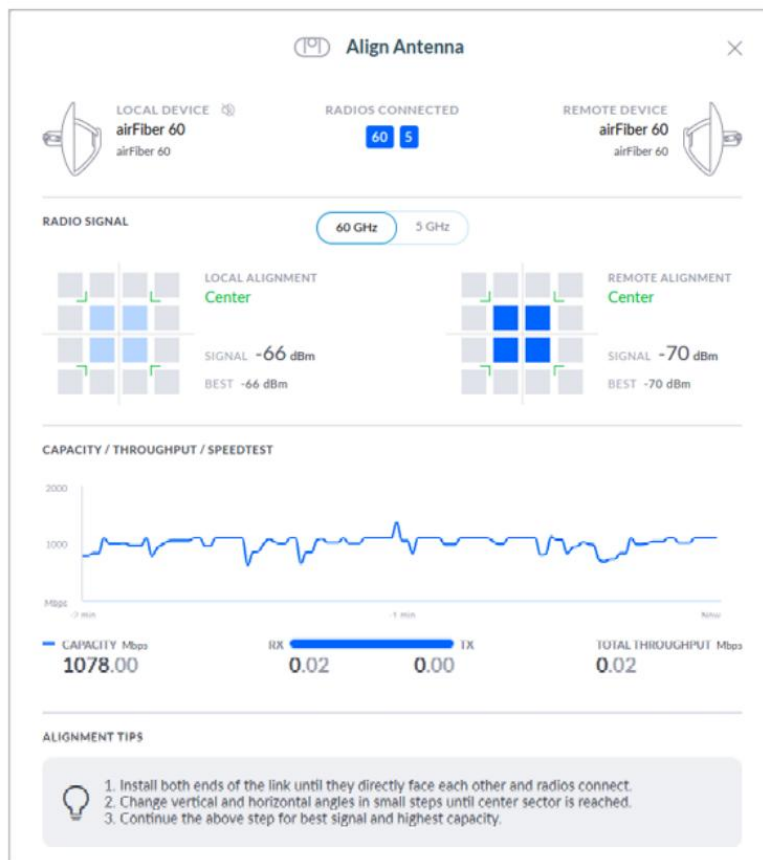


Elevation Adjustment:



Note: DO NOT make simultaneous settings on the access point and the station.

2. **Station:** Visually orient the station towards the access point. To adjust the station position, modify the azimuth and elevation as described in step 1.
3. Open the setting interface, select Tools, then click Align Antenna.



4. Repeat steps 1 and 2 until the link is optimal and the 5G and 60G LEDs turn blue. This ensures the best possible data speed between airFiber devices.



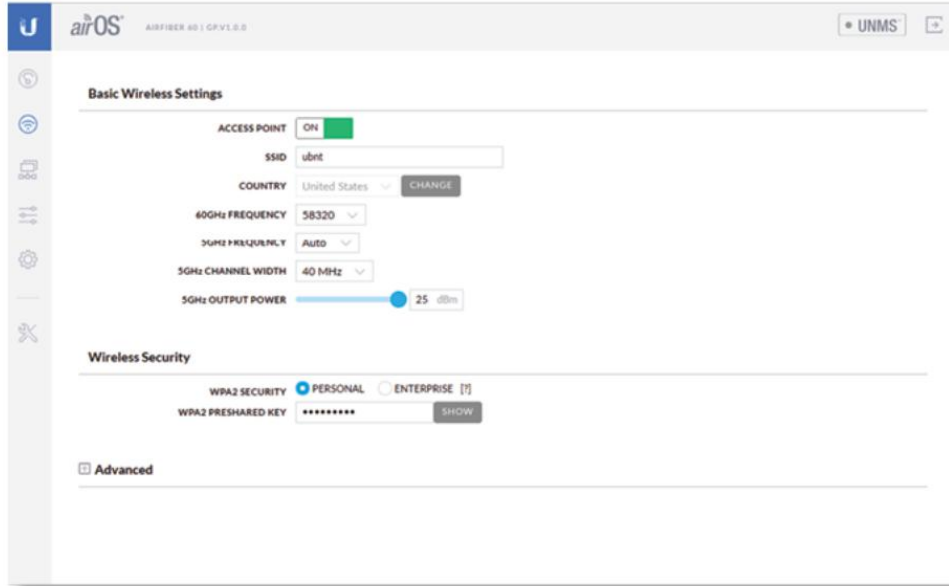
Note: The best way to achieve maximum signal strength is by repeatedly going through azimuth and elevation.

5. Lock the alignment of the two airFiber radios by tightening all the nuts.

remain constant while you tighten the nuts. If any of the values change during the locking process, loosen the nuts, refinish the alignment of each airFiber radio, and retighten the nuts.

Installer Compliance Responsibility

Devices must be professionally installed and it is the responsibility of the professional installer to ensure that the device is operational in accordance with country specific regulatory requirements.



Antenna

The 5GHz Output Power field assists the professional installer in meeting regulatory requirements.

Specifications

AF60	
Dimensions	413 x 413 x 320 mm (16,26 x 16,26 x 12,60")
Weight	
with mounting	1,4 kg (3,09 lb)
without mounting	1,8 kg (3,97 lb)
Material	Aluminium, UV-stable polycarbonate
antenna gain	
5 GHz	11 dBi
60 GHz	38 dBi
network interface	(1) 10/100/1000 Mbps Ethernet port
maximum power consumption	11W
feeding method	Passive PoE, sockets 4, 5+; 7, 8-
Power supply	24VDC 0.5A Gigabit PoE Adapter (included)
voltage range	+22 to +26V DC
Luces LED	Power/Ethernet/5G/60G/GPS
Mounting	Pole mount (included)
wind load	420 N @ 200 km/h (94,4 lbf @ 125 mph)
Wind resistance	200 km/h (125 mph)
ESD/EMP protection	± 24 kV contact/air

Operating temperature	-40 to 60° C (-40° F to 140° F)
operating humidity	5 to 95% non-condensing
Certifications	FCC, IC, CE

System	
peak performance	1,8 Gbps
maximum range	more than 2km
encryption	WPA2-PSK (AES)/WPA2 Enterprise
YOU	airOS GP

Radio	
Maximum transmit power 5/60 GHz combined	25 dBm
Channel Bandwidth	
60 GHz	2160 MHz
5 GHz	20/40/80 MHz

Operating frequency (MHz)		
EE. UU. / CA	U-SO-1	5150 - 5250
	U-NII-2A	5250 - 5350
	U-NII-2C	5470 - 5725
	U-SO-3	5725 - 5850
		57.000 - 67.000
All over the world		5180 - 5875 57.000 - 66.000

Radio Management (MHz)	
All over the world	2412 - 2472
EE. UU. / CA	2412 - 2462

safety instructions

1. Read, follow and save these instructions.
2. Pay attention to all warnings.
3. Only use the devices or accessories indicated by the manufacturer.



WARNING: Do not use this product in a location where it may be submerged in water.



WARNING: Avoid using this product during a lightning storm. There is a remote possibility of an electrical discharge caused by lightning.

electrical safety information

1. It is mandatory to comply with the current, frequency and voltage requirements indicated on the manufacturer's label. Connection to a power source other than those specified may result in malfunction, equipment damage, or fire hazard if limitations are not followed.
2. This equipment contains no operator-serviceable parts. Only a qualified service technician should provide services.
3. This equipment is supplied with a detachable power cord that has an integral safety ground wire designed to be connected to a safety ground. Do not substitute the power cord with one other than the approved type provided. Never use an adapter plug to connect to a two-wire outlet, as it will break the continuity of the ground wire.

Modification or misuse can create a shock hazard, which could cause serious injury or death.

- c. If you have any questions about the installation, contact an electrician qualified person or the manufacturer before connecting the equipment.
- d. The indicated AC adapter provides a safety ground. For installation in a building, adequate short-circuit back-up protection must be provided.

and. A protective connection must be installed in accordance with national wiring rules and regulations.

limited warranty

ui.com/support/warranty

The limited warranty requires arbitration to resolve disputes on a case-by-case basis and, where appropriate, specifying arbitration instead of jury trials or class actions.

Compliance

FCC / CAN ICES-3(A)/NMB-3(A)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules and ISSED Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions.

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

This device complies with ISSED Canada license-exempt RSS standard(s). Exploitation is authorized under the following two conditions:

1. the device may not cause interference; 2.

The device must accept any radio interference received, even if the interference is likely to compromise its operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide acceptable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

This FCC ID: SWX-AF60 / IC: 6545A-AF60 radio transmitter is approved by the FCC and ISSED Canada.

The device for operation in the 5150-5250 MHz band is intended for indoor use only to reduce the possibility of harmful interference to co-channel mobile satellite systems.

IMPORTANT NOTE:

Radiation Exposure Statement:

- This equipment complies with radiation exposure limits set forth for an uncontrolled environment.
- This equipment should be installed and used with a minimum distance of 71 cm between the radiator and your body.
- This transmitter must not be co-located or used in conjunction with any other antenna or transmitter.

Australia and New Zealand



Warning: This equipment is compliant with Class A of CISPR 32. In a residential environment, this equipment may cause radio interference.

Brazil



Note: This equipment is not entitled to protection against harmful interference and may not cause interference in duly authorized systems.

CE marked

The CE marking of this product indicates that the product complies with all applicable directives.



list of countries



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

Members with broadband fixed wireless access are highlighted in blue



Note: This device complies with the maximum transmit power limit per ETSI regulations.



Note: Fixed service or any usage authorization restrictions will follow local country regulations.

The following shall apply to products operating in the 5 GHz frequency range:



Note: This device is only suitable for indoor use when operating in the frequency range of 5150 - 5350 MHz in all member states.



Note: All countries listed can operate at 30 dBm. Member states with broadband fixed wireless access can operate at 36 dBm.



Note: Operation in the 5.8 GHz frequency band is prohibited in member states with fixed broadband wireless access. The rest of the listed countries can use the 5.8 GHz frequency band.

WEEE Compliance Statement

[Declaration of conformity](#)

online resources

