WF-189W Quick Start Guide

Wi-Fi 7 Wall Plate Access Point

This guide explains how to mount the WF-189W, connect its WAN port to an Internet-connected PoE network, and bring it online through the cloud controller. Once registration and configuration are complete, users can connect over Wi-Fi or the LAN ports.

1 Product overview

The WF-189W is a tri-band 2×2 Wi-Fi 7 wall-plate access point for apartments, hotel rooms, dormitories, senior living, and small-business environments. Its rear WAN connection carries network traffic and PoE power. Three accessible LAN ports connect room devices, and LAN1 can also power a compatible PoE device.

2 Product features

- Simultaneous 2.4 GHz, 5 GHz, and 6 GHz operation with 2×2 MU-MIMO and OFDMA.
- Up to 9.3 Gbps aggregate theoretical wireless rate; up to 320 MHz channel width on 6 GHz.
- One 2.5GbE WAN port with 802.3bt/at PoE input; LAN1 supports 2.5GbE and 802.3af PoE Out up to 12.95 W; LAN2 and LAN3 support 1GbE each.
- TIP OpenWiFi R4.1 cloud management for centralized provisioning, monitoring, and over-the-air firmware updates.

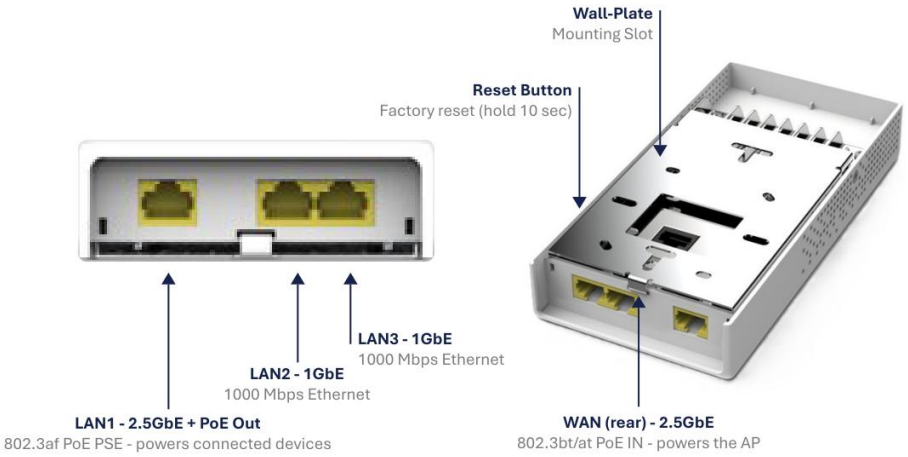
3 Before you begin

Prepare the WF-189W, its compatible mounting bracket and screws, a screwdriver, and suitable Ethernet cables. Use an Internet-connected 802.3bt PoE switch or injector when LAN1 PoE Out is required; 802.3at can be used without PoE Out. For a 2.5GbE uplink, the upstream port and cabling must support 2.5GbE.

The network administrator or service provider must prepare the device for the intended cloud controller and have the Wi-Fi settings ready. The uplink must provide valid IP addressing, a default gateway, DNS, and access to the cloud service.

Install indoors in a dry, ventilated location: 0°C to +40°C and 5% to 95% relative humidity, non-condensing. Keep vents clear and avoid pinching the Ethernet cable.

4 Interfaces and indicator



Interface	Location and specification	Purpose
WAN	Rear RJ-45 2.5GbE; 802.3bt/at PoE input	Connect to the upstream Internet network and supply power to the access point. 802.3bt PoE input can support LAN1 PoE out; 802.3at PoE input can't support LAN1 PoE out.
LAN1	Accessible RJ-45 2.5GbE; 802.3af PoE Out	Connect a wired device; supply up to 12.95 W to a compatible PoE device when WAN uses 802.3bt.
LAN2	Accessible RJ-45 1GbE	Connect an additional wired device.
LAN3	Accessible RJ-45 1GbE	Connect an additional wired device.
Reset	Side factory reset button	Press and hold for 15 seconds to restore factory settings.
Mounting slots	Rear of the device	Engage the tabs on the wall mounting bracket.

Power and status

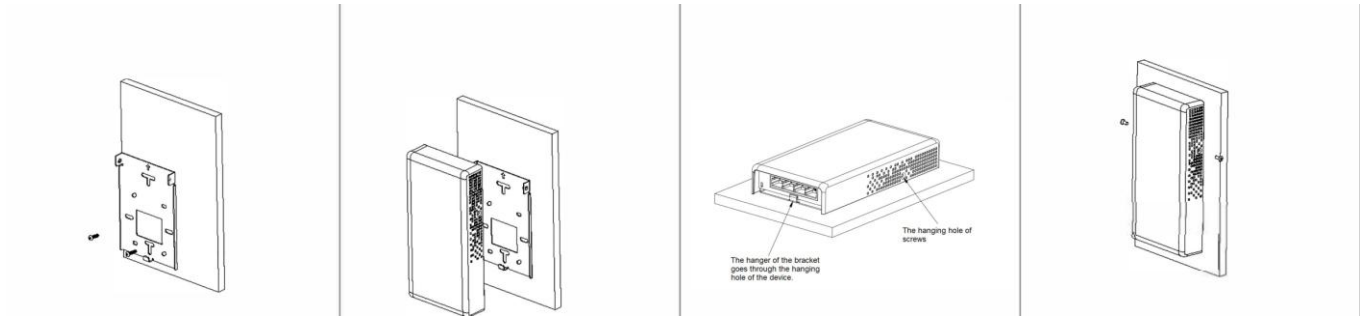
Power is supplied through WAN. Use 802.3bt when LAN1 PoE Out is active, or 802.3at without PoE Out. Maximum device power consumption is less than 40 W. Check the upstream PoE power budget before connecting a powered device to LAN1.

The LED will be lit once the device is powered on and in normal operation.

To restore factory settings, press and hold the side Reset button for 15 seconds. A factory reset clears the device configuration. Contact the administrator before resetting; the device may need to be provisioned again.

5 Wall installation

Use the compatible universal bracket to install the access point on a wall or wall box. Select fasteners suitable for the mounting surface and make sure the bracket is stable before attaching the device.



Bracket orientation, engagement, hanging slots, and retaining screws

Step 1. Secure the bracket. Position the bracket with its direction arrow pointing upward. Route the in-wall Ethernet cable through the bracket opening and fasten the bracket to the wall or wall box with suitable screws.

Step 2. Connect the rear WAN cable. Before hanging the device, plug the uplink Ethernet cable into the rear WAN port. Leave enough slack to seat the connector without bending or trapping the cable.

Step 3. Hang the access point. Align the rear mounting slots with the bracket tabs. Hang the device on the bracket and make sure the tabs engage fully and the device sits flush.

Step 4. Install the retaining screws. Secure the device to the bracket with the two retaining screws shown in the installation sequence. Tighten securely without overtightening.

Step 5. Check the installation. Verify that the access point is stable, the WAN cable is secure, vents are clear, and the LAN ports remain accessible. Enable PoE power and continue with cloud setup.

Installation tips

Place the access point where Wi-Fi coverage is needed. Avoid enclosing it in a metal cabinet or placing it behind large metal objects. Disconnect PoE power before removing the device or adjusting the bracket.

6 Connect and activate

Typical connection: Internet gateway → 802.3bt/at PoE switch → in-wall Ethernet cable → WF-189W WAN. Wi-Fi clients connect wirelessly; wired clients connect to LAN1, LAN2, or LAN3.

If using a PoE injector, connect the upstream network to its data input and its PoE output to WAN. Use 802.3bt for LAN1 PoE Out, or 802.3at without PoE Out.

Step 1. Provide Internet and power. Connect WAN to the prepared uplink. Enable 802.3bt PoE if LAN1 PoE Out is required, or 802.3at otherwise. Allow the access point to boot and obtain the network settings needed to reach the Internet and cloud controller.

Step 2. Register with the cloud. With the service-provider onboarding setup in place, the access point automatically contacts the configured cloud controller and registers. The administrator confirms that the correct device appears online in the cloud portal.

Step 3. Apply the cloud configuration. The administrator assigns the device to the correct site and applies its configuration, including SSID, security, password or authentication settings, and network policies. The cloud controller pushes the configuration to the access point. Keep power and the uplink connected while it is applied.

Step 4. Connect users. After configuration is complete, select the assigned Wi-Fi network and enter the supplied credentials. Connect wired clients to LAN1, LAN2, or LAN3. LAN1 can power an 802.3af device, such as an IP phone, up to 12.95 W when WAN uses 802.3bt. Confirm PoE Out is enabled in the deployed configuration; LAN2 and LAN3 provide data only.

Step 5. Verify service. Open a website from a connected client. If a sign-in portal is configured, complete the required sign-in. Confirm that both wireless and wired access work as intended.

Quick troubleshooting

Symptom	Check
No power	Check the WAN cable, upstream 802.3bt/at support, PoE port setting, and available power budget.
LAN1 device not powered	Use 802.3bt at WAN. Check that PoE Out is enabled, the device supports 802.3af, its power requirement is within 12.95 W, and the cable is secure.
Device not online in cloud	Check upstream Internet, IP addressing, gateway, DNS, cloud reachability, and the service-provider onboarding assignment.
SSID missing or access fails	Confirm that cloud configuration was applied, the SSID is enabled, and the client supports the selected band and authentication method.
Connected without Internet	Check the upstream gateway and Internet service, then ask the administrator to verify client VLAN and access policies.

For assistance, contact your network administrator or service provider.

7. Compliance

Please access the website www.actiontec.com and search for the FCC S-DoC of the corresponding product.

Federal Communications Commission (FCC) Interference Statement

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 generate, 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.

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.

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.

RF exposure warning

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 38 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

FCC regulations restrict operation of this device to indoor use only.

The operation of this device is prohibited on oil platforms, cars, trans, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10000 feet in the 5.925-6.425 GHz band.

Transmitters in the 5.925-7.125 GHz band are prohibited from operating to control or communicate with unmanned aircraft systems.