COMFAST CF-WA350

COMFAST CF-WA350 Outdoor WiFi Repeater User Manual

Model: CF-WA350 | Brand: COMFAST

1. PRODUCT OVERVIEW

The COMFAST CF-WA350 is a high-performance, dual-band (2.4GHz and 5GHz) outdoor wireless access point and repeater designed for extended Wi-Fi coverage in outdoor environments. It supports the 802.11ac Wave2 standard, offering speeds up to 1300Mbps, and features robust weatherproofing (IP67) for reliable operation in various conditions.

Image 1.1: The COMFAST CF-WA350 Outdoor WiFi Repeater, showcasing its sleek design and key features like 1300Mbps speed, dual-band support, dual antenna design, and IP67 rating.

2. PACKAGE CONTENTS

Please verify that all items listed below are included in your package. If any items are missing or damaged,

please contact your vendor.

- COMFAST CF-WA350 Outdoor AP Unit
- User Manual
- PoE Power Adapter
- Stainless Ties (for mounting)
- Power Line

Image 2.1: Contents of the COMFAST CF-WA350 package, including the main unit, user manual, PoE adapter, stainless ties, and power cable.

3. KEY FEATURES

The CF-WA350 is equipped with advanced features to provide a robust and reliable wireless network solution:

- **Dual-Band Wi-Fi:** Supports 2.4G (450 Mbps) and 5G (867 Mbps) for a combined 1300Mbps wireless rate.
- **802.11ac Wave2 MU-MIMO:** Enhances multi-user performance and throughput.

- **Gigabit Ethernet Ports:** Features 1 WAN and 1 LAN 10/100/1000Mbps port for high-speed wired connections.
- **Outdoor Protection Grade (IP67):** Waterproof, dustproof, lightning proof, antifreeze, high temperature resistance, and anti-oxidation for extreme outdoor conditions.
- **High Power & Dual Antenna Design:** Ensures strong signal penetration and wide coverage.
- **Multiple Operating Modes:** Supports AP, Repeater, and Router modes.
- **Qualcomm Chipset:** Utilizes Qualcomm QCA9563+QCA8337+QCA9886 for stable and powerful performance.

New Wave2 Technology

802.11ac Wave2 MU-MIMO, Technology allows multiple clients to connect to a single Wave2 AP for simultaneous Internet access, resulting in increased terminal throughput and user experience.

RF Hardware Acceleration
Independent 2.4 and 5.8 hardware acceleration to better exploit multi-user potential

CPU Hardware Acceleration
Hardware acceleration for Qos and client management

MU-MIMO
Optimizing Antenna Array and using MU-MIMO Beam shaping

Beam Shaping
Increase throughput and coverage through antenna transmission and reception

Image 3.1: Overview of the CF-WA350's luxury configuration, highlighting Qualcomm chips, 1300Mbps speed, high power, support for 160+ users, dual Gigabit ports, Wave2 technology, dual antenna design, and IP67 rating.

Image 3.2: Explanation of New Wave2 Technology, including RF Hardware Acceleration, CPU Hardware Acceleration, MU-MIMO, and Beam Shaping for improved performance.

Image 3.3: Visual representation of the CF-WA350's outdoor protection features: Lightning Proof, Waterproof, Dust Proof, Antifreeze, High Temperature Resistance, and Anti-oxidation.

4. SETUP AND INSTALLATION

4.1 Mounting the Device

The CF-WA350 is designed for outdoor pole or wall mounting. Use the provided stainless ties or appropriate mounting hardware to secure the device in a location with clear line of sight to the desired coverage area.

Image 4.1: The COMFAST CF-WA350 mounted on a pole, demonstrating its outdoor installation capability.

4.2 Powering On

Connect the device to the PoE (Power over Ethernet) adapter using an Ethernet cable. Then, connect the PoE adapter to a power outlet using the provided power line. The device will power on automatically.

4.3 Initial Connection

For initial configuration, connect your computer directly to the LAN port of the PoE adapter using an Ethernet cable. Ensure your computer's IP address is set to obtain an IP address automatically (DHCP) or manually configure it to be in the same subnet as the device's default IP (e.g., 192.168.10.X).

5. OPERATING MODES

The CF-WA350 supports multiple operating modes to suit various network requirements:

5.1 Access Point (AP) Mode

In AP mode, the device connects to your existing wired network and broadcasts a wireless signal, allowing wireless clients to connect to the network. This is ideal for extending Wi-Fi coverage from a wired source.

5.2 Repeater Mode

In Repeater mode, the device wirelessly extends the range of an existing Wi-Fi network. It receives the wireless signal from your main router and re-broadcasts it, effectively expanding your Wi-Fi coverage area without requiring a wired connection to the main router.

5.3 Router Mode

In Router mode, the device acts as a primary router, connecting to an internet source (e.g., a modem) via its WAN port and providing both wired and wireless network access to connected devices. This mode is suitable for setting up a new network.

6. WEB INTERFACE CONFIGURATION

To configure the CF-WA350, access its web-based management interface:

1. Ensure your computer is connected to the device (as described in Section 4.3).

2. Open a web browser (e.g., Chrome, Firefox, Edge).

3. In the address bar, type the default IP address of the device (commonly192.168.10.1 or similar, refer to the device label or quick installation guide for exact IP) and press Enter.

4. Enter the default username and password (commonlyadmin for both, or as specified in the quick installation guide).

5. Once logged in, you can configure network settings, Wi-Fi SSIDs, security protocols, operating modes, and other advanced features. It is highly recommended to change the default login credentials for security purposes.

7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your CF-WA350:

- **Cleaning:** Periodically clean the exterior of the device to remove dust and debris. Use a soft, dry cloth. Do not use liquid cleaners or aerosols.

- **Firmware Updates:** Check the COMFAST official website for the latest firmware updates. Updating firmware can improve performance, add new features, and fix bugs. Follow the instructions provided with the firmware update carefully.

- **Environmental Check:** Ensure the mounting location remains secure and free from obstructions that could interfere with the signal or damage the device.

- **Cable Inspection:** Periodically inspect Ethernet cables and power connections for any signs of wear or damage.

8. TROUBLESHOOTING

If you encounter issues with your CF-WA350, refer to the following common problems and solutions:

- **No Power:**

  - Ensure the PoE adapter is properly connected to a working power outlet and the device.
  - Check the power line and Ethernet cable for damage.

- **Cannot Access Web Interface:**

  - Verify your computer's IP address is in the same subnet as the device's default IP.
  - Try clearing your browser's cache or using a different browser.
  - Ensure the Ethernet cable connection is secure.
  - If the IP address has been changed and forgotten, you may need to perform a factory reset (see below).

- **No Wi-Fi Signal or Weak Signal:**

  - Check the device's status indicators to ensure it is operating correctly.
  - Verify Wi-Fi settings (SSID, password, channel) in the web interface.
  - Ensure the device is mounted in an optimal location with minimal obstructions.

- Adjust antenna orientation if applicable.

- **Slow Internet Speed:**

    - Check the speed of your internet connection directly from the source.
    - Ensure the device is operating in the correct mode (e.g., AP mode for wired backhaul).
    - Consider channel interference; try changing Wi-Fi channels in the web interface.
    - Ensure firmware is up to date.

- **Factory Reset:** If issues persist or you forget the login credentials, you can perform a factory reset. Locate the reset button (often a small pinhole) on the device. With the device powered on, press and hold the reset button for approximately 5-10 seconds until the indicators flash, then release. The device will revert to its default factory settings.

9. TECHNICAL SPECIFICATIONS

Detailed specifications for the COMFAST CF-WA350:

— Specifications —

Model	CF-WA350
Hardware specification	Qualcomm QCA9563+QCA8337+QCA9886 chip solution; Memory:128MB; Flash memory:16MB; Power amplifier chip:2.4G SE2576L, 5.8G SKY85728-11; Set watchdog chip;
Antenna	2.4GHZ 11dBi directional antenna / 5.8GHZ 13dBi directional antenna
Wireless rate	2.4GHz :450Mbps / 5GHz :867Mbps
Radio frequency	Transmitting power: 500mW(27dBm) Receiving sensitivity: -96dBm Operating frequency: 802.11ac/n/a : 5.18GHz-5.825GHz 802.11b/g/n : 2.412GHz-2.482GHz
Physical interface	1*10/100/1000Mbps WAN RJ45; 1*10/100M/1000Mbps LAN RJ45; 1*RESET;
Indicator	Power \ WiFi \LAN \WAN
Power supply	Power supply mode:POE power supply; power adapter:48V 0.5A(Configured);
Power dissipation	<20W
Levels of protection	IP67
Installation	Derrick / Support
Shell Material	ABS
MTBF	>250000H
Size	300*180*50mm
Working Environment	Working Temperature: -10°C~65°C Storage Temperature: -40°C~70°C Operation Humidity: 10%~90%RH Non condensing; Storage Humidity: 5%~90%RH Non condensing

Image 9.1: Comprehensive table of technical specifications for the COMFAST CF-WA350.

Feature	Specification
Model	CF-WA350

Feature	Specification
Hardware Specification	Qualcomm QCA9563+QCA8337+QCA9886 chip solution; Memory: 128MB; Flash memory: 16MB; Power amplifier chip: 2.4G SE2576L, 5.8G SKY85728-11; Set watchdog chip;
Antenna	2.4GHz 11dBi directional antenna / 5.8GHz 13dBi directional antenna
Wireless Rate	2.4GHz: 450Mbps / 5GHz: 867Mbps
Radio Frequency	Transmitting power: 500mW (27dBm); Receiving sensitivity: -96dBm; Operating frequency: 802.11ac/n/a: 5.18GHz-5.825GHz; 802.11b/g/n: 2.412GHz-2.482GHz
Physical Interface	1*10/100/1000Mbps WAN RJ45; 1*10/100M/1000Mbps LAN RJ45; 1*RESET
Indicator	Power \ WiFi \ LAN \ WAN
Power Supply	PoE power supply; power adapter: 48V 0.5A (Configured)
Power Dissipation	<20W
Levels of Protection	IP67
Installation	Derrick / Support
Shell Material	ABS
MTBF	>250000H
Size	300*180*50mm
Working Environment	Working Temperature: -10℃~65℃; Storage Temperature: -40℃~70℃; Operation Humidity: 10%~90%RH Non condensing; Storage Humidity: 5%~90%RH Non condensing

10. SAFETY INFORMATION

Please read and follow these safety guidelines to prevent damage to the device or injury to yourself:

- Use only the power adapter provided with the device.
- Do not open or attempt to repair the device yourself. Refer all servicing to qualified personnel.
- Ensure proper grounding for outdoor installations to protect against lightning strikes.
- Avoid placing the device near heat sources or in direct sunlight for prolonged periods beyond its operating temperature range.
- Keep the device away from water and excessive moisture, despite its waterproof rating, to prevent electrical hazards.
- Do not block ventilation openings.

11. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the warranty card included with your product or visit the official COMFAST website. You can also contact your local distributor or reseller for assistance.

Related Documents - CF-WA350

COMFAST Quick Installation Guide Wireless Expander/Repeater Version: V1.0	[COMFAST Wireless Expander/Repeater Quick Installation Guide](#) A quick installation guide for the COMFAST Wireless Expander/Repeater, covering product structure, setup steps, working modes (AP, Router, Repeater), WiFi settings, IPv6 configuration, Mesh setup, and troubleshooting.
COMFAST Návod na použitie Wireless expander/repeater M0304351	[COMFAST Wireless Repeater M0304351 User Manual](#) User manual for the COMFAST Wireless Repeater M0304351, detailing product features, installation steps, operation, frequently asked questions, warranty conditions, and EU declaration of conformity.
COMFAST Quick Installation Guide Wireless Expander/Repeater Version: V1.0	[COMFAST CF-XR186 Wireless Expander/Repeater Quick Installation Guide](#) A quick installation guide for the COMFAST CF-XR186 Wireless Expander/Repeater, detailing product structure, setup steps, working modes, IPv6 settings, Mesh settings, light control status, and FAQs.
COMFAST Outdoor AP Quick Installation Guide Outdoor AP M0304435 Version 1.0	[COMFAST Outdoor AP Quick Installation Guide](#) A quick installation guide for the COMFAST Outdoor AP (Model CF-EW74), detailing cable installation, device connection, and configuration for AP, Bridge, Router, and Repeater modes.

COMFAST Quick Installation Guide Wireless Expander/Repeater M020S088 Version : V3.0	[COMFAST CF-WR758AC Wireless Expander/Repeater Quick Installation Guide](#) A quick installation guide for the COMFAST CF-WR758AC Wireless Expander/Repeater, detailing product structure, setup steps, operating modes, and FAQs.
COMFAST CF-WR758AC User Manual • Uživatelský manuál • Uživateľský manuál • Használati útmutató • Benutzerhandbuch • Manuel d'utilisation	[COMFAST CF-WR758AC WiFi Extender User Manual](#) Comprehensive user manual for the COMFAST CF-WR758AC WiFi extender, detailing setup, operating modes, and troubleshooting.