

High performance dual-band 802.11ax Outdoor Wireless AP WF-660AG Product Datasheet

VERSION 2.0

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www.actiontec.com

■ Overview

WF-660AG is a dual-band 2x2 MU-MIMO 802.11ax outdoor Wi-Fi AP, which is designed for high-density deployments in outdoor location that require premium performance. WF-660AG supports 802.11ax 2.4G/ 5G Wi-Fi access and can provide up to 1,774Gbps aggregated data rates. It helps you to establish the high speed and stable wireless network. The enhanced transmission power and receive sensitivity make it deliver the high throughput and reliable coverage required.

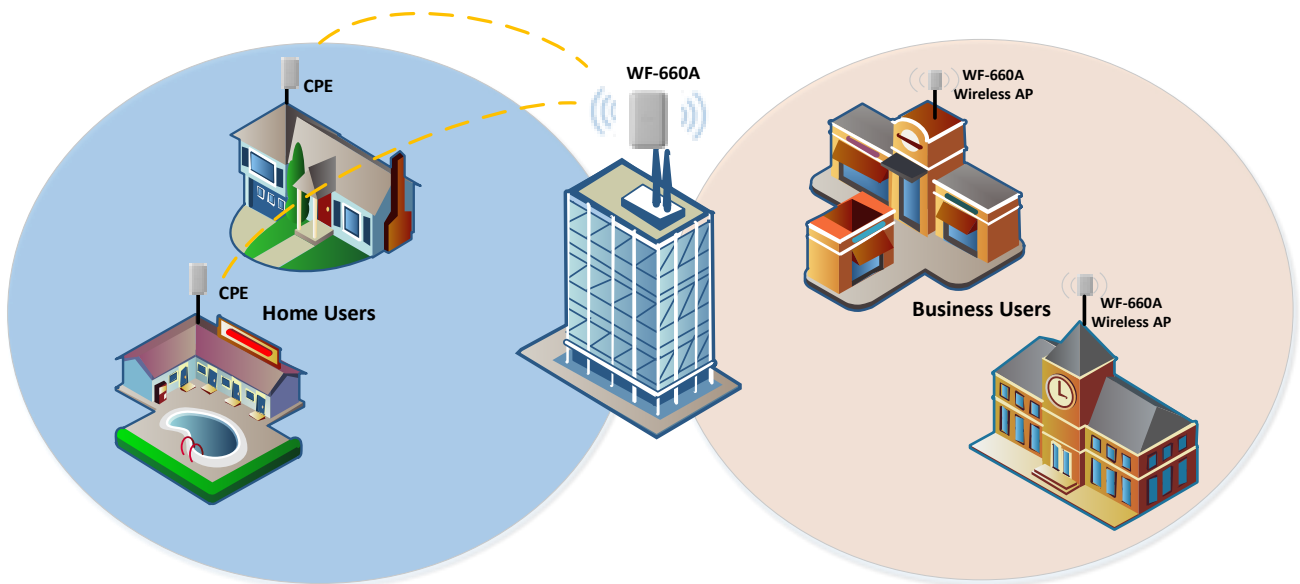
WF-660AG provides the most economical and effective way for Wi-Fi backhaul solution. Having perfect compatibility, WF-660AG works with most wireless terminals and CPEs to build a high capacity Wi-Fi system.

WF-660AG supports OpenWi-Fi development platform. This is easy for the user to develop the applications according to their customization requirement.



■ Key Features

- Supports pole and wall mounting
- Supports 2.4G 2x2/ 40MHz Wi-Fi (802.11b/ g/ n/ ax), up to 574Mbps link rate
- Supports 5G 2x2/ 80MHz Wi-Fi(802.11a/ n/ ac/ ax), up to 1.2Gbps link rate
- Supports BLE 5.0
- Supports GPS
- 2 x Dual-band Integrated 120° directional antennas
- 1 x Integrated Bluetooth antenna
- 1 x 2.5GE WAN with 802.3 at PoE (PD)
- Reserved 1x M.2 socket, for Wi-Fi6E expansion (Optional)
- 1x Reset Button
- 1x RGB LEDs for visual indication
- Supports OpenWiFi development platform



■ Specification

Item	WF-660AG
Dimension (W x D x H)	260mm x 140mm x 71mm, without bracket
Weight	1500g, without bracket
Installation	Pole and wall mounting
LEDs	1 x RBG LED (Software definition)
Interface	1 x 2.5GE WAN with 802.3 at PoE(PD) 1 x Reset button
Input Voltage	50V ~ 57V, 802.3 at PoE (PD)
Power consumption	< 20W
Environmental Specification	
Temperature	Operation: -40°C ~ +65°C Storage: -40°C ~ +85°C
Operating Humidity	5% ~ 95% (non-condensing)
Elevations	86kPa ~ 106kPa altitude
Dustproof and Waterproof	IP67
Safety	<ul style="list-style-type: none"> • NRTL Listed 62368-1 (US & CA) • CB with IEC/EN 62368-1 IEC 60950-22 (Basic safety certificate for worldwide marketing) • GB 9254 -2008(Class B of Product) EN55032 , EN55035, EN61000-4-3 Level 4; EN61000-4-2, FCC Part 15B • WEEE 2002/96/EC recyclable materials requirements

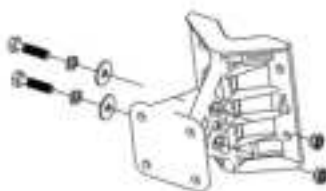
Item	WF-660AG								
Reliability									
MTBF	<div>> 300,000 Hours<ul style="list-style-type: none">Telcordia SR-332, Reliability Prediction Procedures for Electronic Equipment, Issue 3, Method 1, Case 3, GB/GC (Ground Benign, Controlled) environment, 25°C ambient temperature. Steady state, not including software failure.</div>								
AFR	AFR (Annualized Failure Rate) < 1.5% (in continuous operation)								
Chipset									
SoC	Qualcomm chipset (IPQ6028)								
Flash	eMMC5.0 4BG								
DDR	512MB 16bit DDR4 memory								
Wi-Fi Interface									
Operating frequency	2.4G radio:2.4000GHz~2.4835GHz								
	5G radio:5.150~5.250,5.250~5.350,5.470~5.725, 5.725~5.850 GHz								
Data Rate	802.11b: 1, 2, 5.5, and 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps 802.11a: 6, 9, 12, 18, 24, 36, 48 and 54Mb/s 802.11n: MCS0~MCS7 802.11ac: MCS0 ~ MCS9 802.11ax: MSC0 ~ MCS11								
Receive Sensitivity	802.11g: -90dBm@6Mbps -74dBm@54Mbps								
	802.11n: <table><tr><td></td><td>HT20</td><td>HT40</td></tr><tr><td>MCS0/8/16</td><td>-90dBm</td><td>-87dBm</td></tr></table>				HT20	HT40	MCS0/8/16	-90dBm	-87dBm
	HT20	HT40							
MCS0/8/16	-90dBm	-87dBm							

Item	WF-660AG														
	<table><tr><td>MCS7/15</td><td>-71dBm</td><td>-68dBm</td></tr></table>			MCS7/15	-71dBm	-68dBm									
MCS7/15	-71dBm	-68dBm													
	802.11a: -90dBm@6Mbps -74dBm@54Mbps														
	802.11ac: <table><tr><td></td><td>VHT20</td><td>VHT40</td><td>VHT80</td></tr><tr><td>MCS0</td><td>-90dBm</td><td>-87dBm</td><td>-84dBm</td></tr><tr><td>MCS8</td><td>-67dBm</td><td>-61dBm</td><td>-58dBm</td></tr></table>				VHT20	VHT40	VHT80	MCS0	-90dBm	-87dBm	-84dBm	MCS8	-67dBm	-61dBm	-58dBm
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	HE20	HE40	HE80												
MCS0	-90dBm	-87dBm	-84dBm												
MCS11	-60dBm	-57dBm	-54dBm												

■ Installation Guide

Step 1

Assemble the bracket with the two hex cap screws (M8x35).



Step 2

Connect the device and bracket with the four hex cap screws (M8x20).



Step 3

Mount the device on the pole with the clamp (Ø25mm-Ø150mm).





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 51 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

■ Contact Information

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