Dual-band Wi-Fi7 Router/Extender WF-709F2

Product Datasheet

VERSION1.2

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www.actiontec.com

Overview

The Dual-band Wi-Fi 7 WF-709F2 is designed to provide Wi-Fi network connectivity for homes and business based on the latest 802.11be chipset design. With the WF-709F2, the user can utilize EasyMesh R4, which provides a self-configuring, self-healing and self-managing Wi-Fi network. It dynamically selects the most reliable Wi-Fi path and enables fast and seamless handoffs for end-users.

WF-709F2 is one of the best performing WiFi 7 router in the market. It supports 802.11be on all Wi-Fi radio bands.

- 2.4G radio supports 2x2 802.11b/g/n/ac/ax/be MIMO.
- 5G radio supports 4x4 802.11a/n/ac/ax/be MIMO.

WF-709F2 can meet the requirements for high-speed real-time traffic and high-bandwidth entertainment, such as 4K video, video game streaming and VR.

The integration of Optim cloud greatly enhances the user experience for both network operators and end users by providing efficient device management and advanced control capabilities.

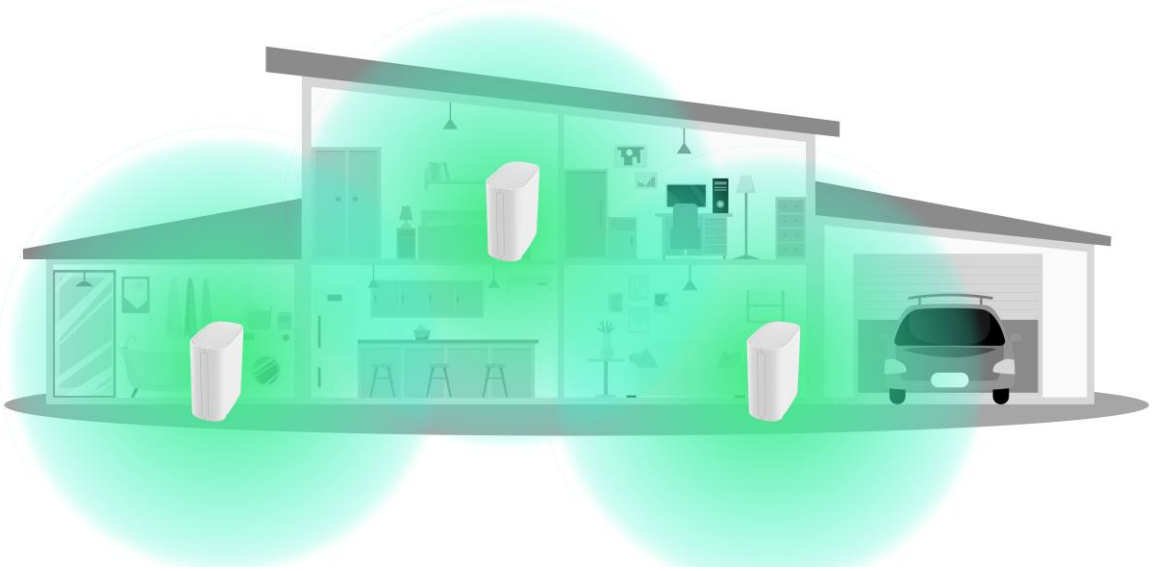
With global deployments in mind, the WF-709F2 utilized standard AC/DC adapter, allowing easy adaptation everywhere in every country.

Key Features

- Desktop placement /Wall-mounted
- 2.4GHz 40MHz 2x2 802.11b/g/n/ax/be
- 5GHz 160MHz 4x4 802.11a/n/ac/ax/be
- WPA/WPA2-PSK(AES)/WPA3
- Integrated Wi-Fi antennas
- 1 x 2.5GbE WAN
- 1 x 2.5GbE LAN
- 2 x GbE LAN
- 3 x Status LEDs (multi-color)
- 1 x WPS button
- 1 x Reset button
- 1 x DC jack
- Supports router/extender functions
- Supports TR-069 management
- Supports EasyMesh R4

Application Scenario

- Three WF-709F2s can form a Wi-Fi mesh network. One configured as the Gateway and the other two configured as the Wi-Fi Extender:



Specification

Item	WF-709F2
System Hardware Spec	
Dimension	158mm x 175mm x 90mm
Installation	Desktop placement
LEDs	3x Status LEDs (front panel)
Interface	1 x 2.5GbE WAN 1 x 2.5GbE LAN 2 x GbE LAN 1 x WPS 1 x Reset 1 x DC jack
SoC	Qualcomm
Flash	512 MB SPI NAND Flash
DDR	1GB DDR4 RAM
Input Voltage	+12V/1.5A
Power consumption	< 17W
Operating Temperature	Operation: 0℃ ~ +40℃ Storage: -40℃ ~ +85℃
Operating Humidity	5% ~ 95% (non-condensing)
Elevations	86kPa ~ 106kPa altitude
Dustproof and Waterproof	IP20

Item	WF-709F2
Compliance	• IEC 62368-1:2014 (Second Edition)+A11: 2017 • UL 62368-1, 2nd Ed, 2014-12-01 (Audio/video, information and communication technology equipment Part 1: Safety requirements) • CAN/CSA C22.2 No. 62368-1-14, 2nd Ed (Audio/video, information and communication technology equipment Part 1: Safety requirements) • FCC • ETL • RoHS 2011/65/EU compliant (RoHS 10 compliant, no Pb)
MTBF	> 300,000 Hours Telcordia SR-332, Reliability Prediction Procedures for Electronic Equipment, Issue 3, Method 1, Case 3, GB/GC (Ground Benign, Controlled) environment, 25ºC ambient temperature. Steady state, not including software failure.
AFR	AFR (Annualized Failure Rate) < 1.5% (in continuous operation)
Wi-Fi Spec	
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~MCS15 802.11ac: MCS0 ~ MCS9 802.11ax: MCS0~MCS11 802.11be: MCS0~MCS13
Receive Sensitivity	2.4G 802.11g: -90dBm@6Mbps -74dBm@54Mbps 802.11n:

	HT20	HT40
MCS0	-90dBm	-87dBm
MCS7	-71dBm	-68dBm

Software Features

Category	Features
Network	Bridge Mode - DHCP Client - Backhaul with 2.4G/5G Wi-Fi/Ethernet
	Router Mode - IPv4 - IPv6 - NAT - WAN DHCP client - LAN DHCP server - DNS server - DHCP reservation - uPNP - Port forwarding - Backhaul with Ethernet
	IGMP Snooping
Wi-Fi	2.4GHz bandwidth: 20/40MHz, 5GHz bandwidth: 20/40/80/160MHz
	802.11 k/v/r
	Band steering
	Channel scan
	DFS
	SSID broadcast
	WPA/WPA2/WPA3 PSK security
TR-069 Management	Network topology display - Device connected - Client accessed - Channel - Backhaul type
	Network optimize
	WPA/WPA2/WPA3 PSK security
	Freeze client

	Device information - Status - Online time - IP address - MAC address - Firmware version - Channel
	Client information - Status - Online time - IP address - MAC address - Channel
	Network statistic chart - Bandwidth usage - RSSI - Channel congestion - Event
	Utilities - Reboot device - Upgrade remotely - Speed Test

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 20 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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