Home Mesh Wireless WF-808

Product Datasheet

VERSION3.2

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Partnership for the Next Generation Broadband Solution

www.cigtech.com

Overview

WF-808 product is designed to pluggable Wi-Fi network connectivity at home. With WF-808, the customer can set up a smart Wi-Fi home network, which provides self-configuring, self-healing and self-managing,. It dynamically selects the most reliable Wi-Fi path and enables fast and seamless handoffs for end-users.

WF-808 supports dual-band 802.11ac. 2.4G radio supports 2x2 802.11b/g/n MIMO. 5G radio supports 4x4 802.11a/n/ac MIMO. It can provide up to 2Gbps aggregate Wi-Fi access speed. WF-808 can meet the requirements for the high-speed real traffic and entertainment, such as HD video, video game and VR.

WF-808 integrates Opensync™ control plane launched by Plume. Opensync™ creates a multi-industry, open service curation, delivery, management and support framework. WF-808 supports to be managed by Plume cloud remotely. This allows for curation, rapid and scalable delivery, comprehensive back office management, and enhanced support of cloud-based services to the consumer.

WF-808 designed to operate as a GW or remote WiFi AP in the network. It supports be configured and managed by the Plume mobile App. It will make it much easier for the end-users to set up their own home Wi-Fi network.

Key Features

- Desktop placement
- 2.4GHz 2x2 802.11b/g/n
- 5GHz 4x4 802.11a/n/ac
- WPA/WPA2-PSK(AES)
- BLE 5.0
- 6 x Integrated Wi-Fi antennas
- 1 x Integrated BLE antennas
- 1 x GE RJ45 LAN
- 1 x Status LED (multi-color)
- 1 x AC/ DC power supply
- Supports Opensync™ control plane
- Integrated with Plume Cloud management
- Integrated with Plume mobile management application (Android and iOS)

  Please download HomePass App by Plume QR code.

Software Features

Category	Features
Network	Router Mode - IPv4 - 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: 20/40/80MHz
	802.11 k/ v/ r
	Band steering
	Channel scan
	DFS
	SSID broadcast
	WPA/WPA2 PSK security
	uAPSD
Cloud Management	Network topology display - Device connected - Client accessed - Channel - Backhaul type
	Network optimize
	Network SSID based on the location
	WPA/WPA2 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
Mobile App Management	Device discovery
	Add/ Delete the device
	Configure SSID

	Configure password
	Auto upgrade
	Antivirus
LED	**Green Solid**: Device power on.
	Blue Blinks: Device is connecting to the Cloud.
	OFF: Device has been connected to the Cloud.
	Blue Double Blinks: Network optimization in progress or locate device.

Specification

Item	WF-808
Dimension (D x H)	82mm (Diameter) × 100mm (High)
Weight	280g
Installation	Desktop placement
LEDs	1x Status LED (multi-color)
Interface	1 x GE RJ45 LAN 1 x DC jack, support USB type-C DC 5V in
Input Voltage	+5V/ 3A
Power consumption	< 10W
Environmental Specification	
Temperature	Operation: 0℃ ~ +40℃ Storage: -40℃ ~ +85℃
Operating Humidity	5% ~ 95% (non-condensing)
Elevations	86kPa ~ 106kPa altitude
Dustproof and Waterproof	IP20
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 • CE • RoHS 2011/65/EU compliant (RoHS 10 compliant, no Pb)

<table>
<tr><th>Item</th><th>WF-808</th></tr>
<tr><td colspan="2">Reliability</td></tr>
<tr><td>MTBF</td><td>> 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.</td></tr>
<tr><td>AFR</td><td>AFR (Annualized Failure Rate) < 1.5% (in continuous operation)</td></tr>
<tr><td colspan="2">Chipset</td></tr>
<tr><td>Wi-Fi SoC</td><td>MT7621A MIPS1004Kc (880MHz, Dual- Core)</td></tr>
<tr><td>Flash</td><td>128MB NAND flash</td></tr>
<tr><td>DDR</td><td>256MB DDR3 Ram</td></tr>
<tr><td colspan="2">Wi-Fi Interface</td></tr>
<tr><td rowspan="2">Operating frequency</td><td>2.4G radio:2.4000GHz~2.4835GHz</td></tr>
<tr><td>5G radio:5.150~5.250,5.250~5.350,5.470~5.725, 5.725~5.850 GHz</td></tr>
<tr><td rowspan="2">Maximum Transmit power (per chain)</td><td>2.4G radio: 17dBm@MCS0, 15dBm@MCS15</td></tr>
<tr><td>5G radio:19dBm@MCS0; 16dBm@MCS9</td></tr>
<tr><td>Data Rate</td><td>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</td></tr>
<tr><td rowspan="2">Receive Sensitivity</td><td>802.11g: -90dBm@6Mbps
-74dBm@54Mbps</td></tr>
<tr><td>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>
<tr><td>MCS7/15</td><td>-71dBm</td><td>-68dBm</td></tr>
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<table>
<tr><th>Item</th><th>WF-808</th></tr>
<tr><td></td><td>802.11a: -90dBm@6Mbps
-74dBm@54Mbps</td></tr>
<tr><td></td><td>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>/</td><td>/</td></tr>
<tr><td>MCS9</td><td>/</td><td>-61dBm</td><td>-58dBm</td></tr>
</table></td></tr>
<tr><td>Antenna Pattern
(Built-in Antennas)</td><td>
<table>
<tr><td>Frequency(MHz)</td><td>2400 ~ 2500</td><td>4940 ~ 5850</td></tr>
<tr><td>Polarization</td><td>Vertical/Horizontal</td><td>Vertical/Horizontal</td></tr>
<tr><td>Gain(dBi)</td><td>>3</td><td>>3</td></tr>
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Contact Information

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FCC Class B Equipment

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 generates, 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 and correct the interference by implementing one or more of the following measures:

• Reorient or relocate the device;

• Increase the separation between the equipment and receiver;

• Connect the equipment to an outlet on a circuit different from that to which the receiver is connected (applicable only to powerline products);

• Consult the dealer or an experience radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Actiontec Electronics, Inc., may void the user's authority to operate the equipment.

Declaration of Conformity

Declaration of Conformity for Products Marked with the FCC logo or Industry Canada (IC)- North America Only

This device complies with Part 15 of the FCC Rules and with Industry Canada license-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 of the device.

Important Note on Wi-Fi

If applicable, this equipment complies with FCC/Industry Canada radiation exposure limits set forth for an uncontrolled environment.

The radio has been found to be compliant to the requirements set forth in CPR 47 Sections 2.1091, 15.247 (b) (4),15.407 addressing RF Exposure from radio frequency devices as defined in Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields. The equipment should he installed more than 30 cm (~ 12 in.) from your body or nearby persons.

For product available in the USA/Canada market, only channel l~11 can be operated. Selection of other channels is not possible.

The device could automatically discontinue transmission in case of absence of information to transmit, or operational failure. Note that this is not intended to prohibit transmission of control or signaling information or the use of repetitive codes where required by the technology.

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful

interference to co-channel mobile satellite systems.

The maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comp with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

The transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.