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# HomeMesh™ Wireless WF-808 Product Datasheet

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VERSION 1.0

December, 2019

*Partnership for the Next Generation Broadband Solution*

[www.cigtech.com](http://www.cigtech.com)

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## ■ Overview

WF-808 product is designed to extend 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.

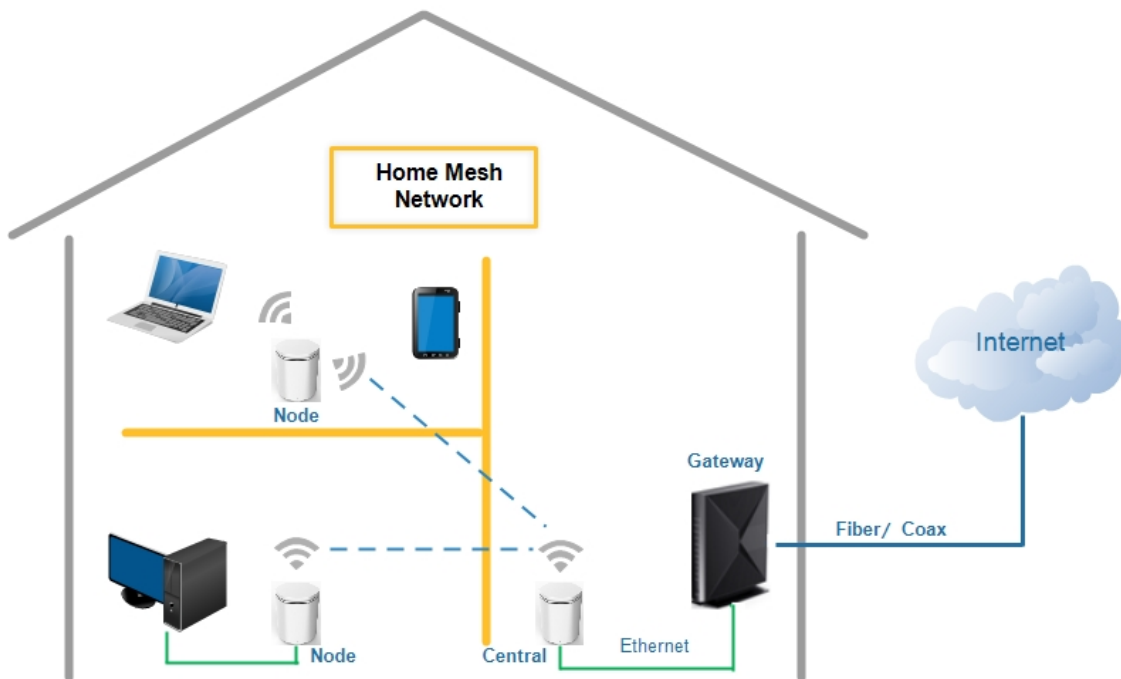
WF-808 integrates Opensync™ control plane launched by Plume. Opensync™ creates a multi-industry, open service curation, delivery, management and support framework. WF-808 supports to be managed by Plume cloud remotely. This allows for curation, rapid and scalable delivery, comprehensive back office management,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

WF-808 supports to 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)



## ■ Specification

Item	WF-808
Dimension (D x H)	82mm (Diameter) x 100mm (High)
Weight	280g
Installation	Desktop placement
LEDs	1x Status LED (multi-color)
Interface	1 x GE RJ45 LAN 1 x DC jack, support DC 5V in
Input Voltage	+5V/ 3A
Power consumption	< 10W
<b>Environmental Specification</b>	
Temperature	Operation: 0°C ~ +40°C Storage: -40°C ~ +85°C
Operating Humidity	5% ~ 95% (non-condensing)
Elevations	86kPa ~ 106kPa altitude
Dustproof and Waterproof	IP20
Safety	The device compliances with: <ul style="list-style-type: none"> <li>• IEC 62368-1:2014 (Second Edition)+A11: 2017</li> <li>• UL 62368-1, 2nd Ed, 2014-12-01 (Audio/video, information and communication technology equipment Part 1: Safety requirements)</li> <li>• CAN/CSA C22.2 No. 62368-1-14, 2nd Ed (Audio/video, information and communication technology equipment Part 1: Safety requirements)</li> <li>• FCC</li> <li>• CE</li> </ul>

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	<ul style="list-style-type: none"> <li>RoHS 2011/65/EU compliant (RoHS 10 compliant, no Pb)</li> </ul>
<b>Reliability</b>	
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, 25°C ambient temperature. Steady state, not including software failure.
AFR	AFR (Annualized Failure Rate) < 1.5% (in continuous operation)
<b>Chipset</b>	
Wi-Fi SoC	MT7621A MIPS1004Kc (880MHz, Dual- Core)
Flash	128MB NAND flash
DDR	128MB DDR3 Ram
<b>Wi-Fi Interface</b>	
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
Maximum Transmit power (per chain)	2.4G radio: 17dBm@MCS0, 15dBm@MCS15
	5G radio:19dBm@MCS0; 16dBm@MCS9
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
Receive Sensitivity	802.11g: -90dBm@6Mbps -74dBm@54Mbps

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	<p>802.11n:</p> <table border="1" data-bbox="483 394 1032 541"> <thead> <tr> <th></th> <th>HT20</th> <th>HT40</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>802.11a: -90dBm@6Mbps -74dBm@54Mbps</p> <p>802.11ac:</p> <table border="1" data-bbox="483 705 1107 898"> <thead> <tr> <th></th> <th>VHT20</th> <th>VHT40</th> <th>VHT80</th> </tr> </thead> <tbody> <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> </tbody> </table>					HT20	HT40	MCS0/8/16	-90dBm	-87dBm	MCS7/15	-71dBm	-68dBm		VHT20	VHT40	VHT80	MCS0	-90dBm	-87dBm	-84dBm	MCS8	-67dBm	/	/	MCS9	/	-61dBm	-58dBm
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