Wi-Fi Extender DeskPod WF-808

Product Datasheet

VERSION3.2

Partnership for the Next Generation Broadband Solution

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 capabilities. It dynamically selects the most reliable Wi-Fi channel and path, 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 is able to operate on Plume cloud just like any Plume product. This allows for curation, rapid and scalable delivery, comprehensive back office management, and enhanced support of cloud-based services to the consumer.

End-users add WF-808 to their Plume account using only the Plume Mobile App, it is also managed by the Plume Mobile App, making it much easier for the end-users to set up their Wi-Fi network.

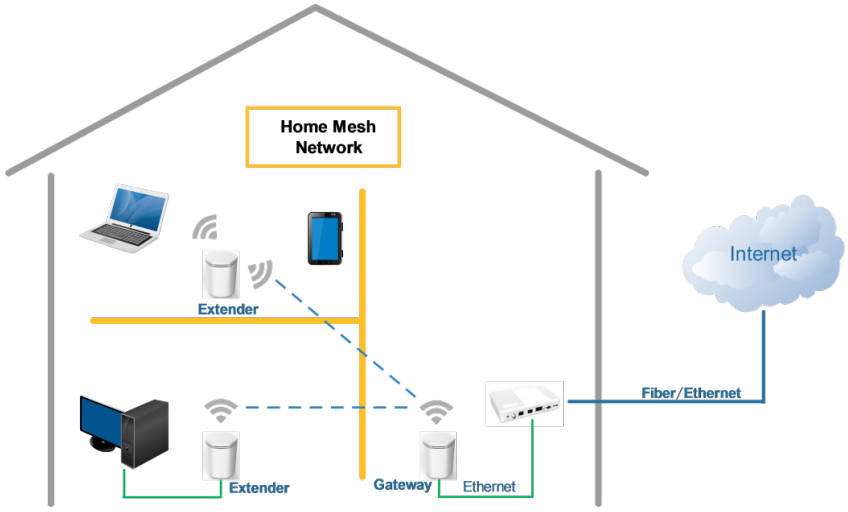
Key Features

- 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)

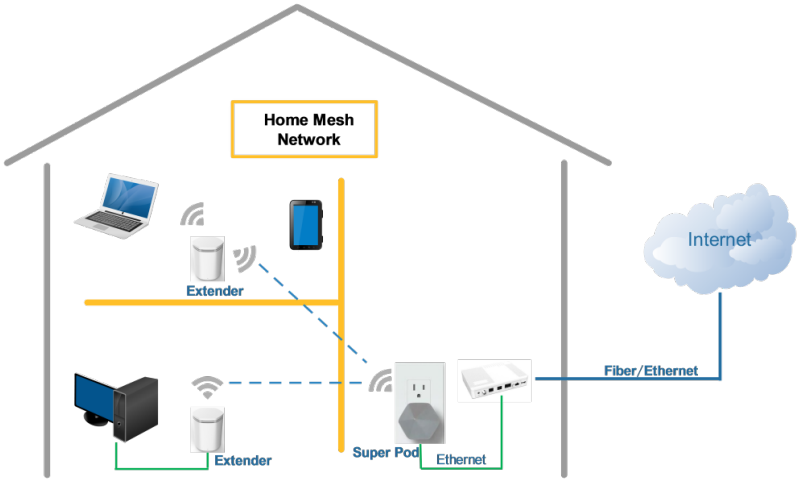
  Please download HomePass App using the following Plume QR code:

Application Scenario

- Three WF-808s set up the mesh network. One operates as the gateway and the other two as Wi-Fi extender.



- WF-808 interoperates with Plume SuperPod to set up the mesh network. SuperPod works as the gateway and WF-808 works as the Wi-Fi extender.



Software Features

Category	Features
Network	Bridge Mode - DHCP Client - Backhaul with 2.4G/ 5G Wi-Fi/ Ethernet
	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 (under development)
Mobile App Management	Device discovery
	Add/ Delete the device
	Configure SSID
	Configure password
	Auto upgrade
	Antivirus (under development)
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
Safety	The device compliances with: • 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

Item	WF-808
	• CE • RoHS 2011/65/EU compliant (RoHS 10 compliant, no Pb)
Reliability	
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)
Chipset	
Wi-Fi SoC	MT7621A MIPS1004Kc (880MHz, Dual- Core)
Flash	128MB NAND flash
DDR	256MB DDR3 Ram
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
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

<table>
<tr><th>Item</th><th>WF-808</th></tr>
<tr><td></td><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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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>/</td><td>/</td></tr>
<tr><td>MCS9</td><td>/</td><td>-61dBm</td><td>-58dBm</td></tr>
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<tr><td>Antenna Pattern
(Built-in Antennas)</td><td>
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<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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