

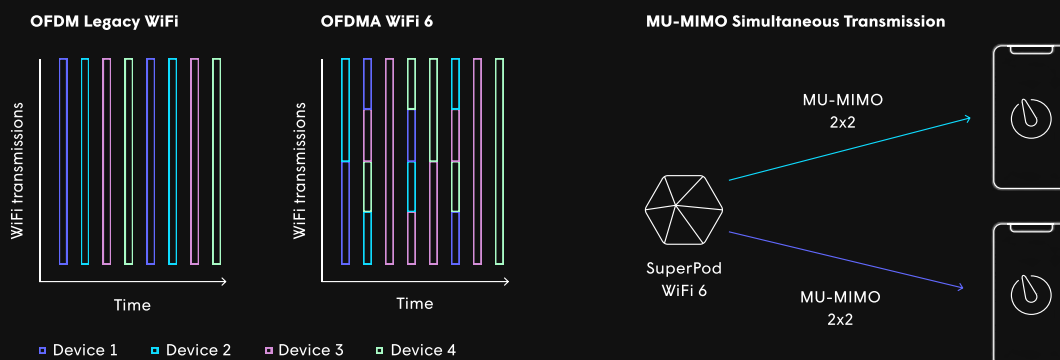


# Plume SuperPod with WiFi 6

The fastest, most innovative platform to future proof your customer deployments.

## The product

Coupled with the Plume Cloud, Plume SuperPod with WiFi 6 introduces WiFi protocol enhancements that increase the home network's speed and capacity, expanding the longevity of deployments to meet customer demands. Its tri-band design more than doubles spectrum efficiency compared to dual-band solutions and more flexibly adapts to any home topology without compromising performance. Enhancements such as OFDMA, 160MHz channel widths, 1024-QAM, and Target Wake Time (TWT) allow for more devices to efficiently send and receive data at higher speeds in dense environments.



## Performance

Compared to WiFi 5 solutions, WiFi 6 ushers in standardized channel bandwidths of 160MHz, which doubles the speed and helps maintain high capacity on mesh backhaul links. With the inclusion of 1024-QAM and more efficient subcarrier sizing, the overall capacity increases by almost 180% over the existing standard.

## Load

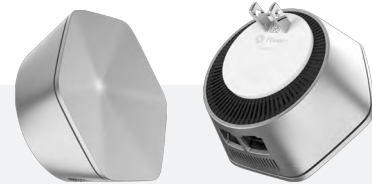
WiFi 6's advanced method of simultaneous transmissions, OFDMA (Orthogonal Frequency Division Multiple Access), focuses on maintaining efficiency while communicating to a large number of devices. Additionally, the use of MU-MIMO allows for simultaneous transmission to WiFi 5 and WiFi 6 devices by splitting the MIMO streams, such as supporting two separate 2x2 MIMO communications with different client devices from a single SuperPod 4x4 radio.

## Device connectivity

In addition to OFDMA enabled simultaneous transmissions to multiple devices in the home, WiFi 6 adds Target Wake Time (TWT), an improvement to the APSD mechanism that helps conserve the battery life of network devices. For devices in sleep mode, TWT schedules a wake time and ensures the WiFi channel is clean for the device to check in with the SuperPod to receive any queued data.

## Compatibility

WiFi 6 has no special requirements for installation and is compatible with WiFi 5 and previous standard client devices. Therefore, WiFi 5 and WiFi 6 pods can be mixed in the same network, though doing so is not recommended in order to avoid an uneven performance experience.



## Specifications

### WiFi specification

<b>Radios</b>	5GHz Lower 4x4 MIMO 802.11 n/ac/ax 5GHz Upper 2x2 MIMO 802.11 n/ac/ax 2.4GHz 2x2 MIMO 802.11 b/g/n/ax
<b>Channels</b>	1-13 2.4GHz 5GHz Lower 36-64 5GHz Upper 100-161
<b>Channel BW</b>	2.4GHz 20/40MHz 5GHz Lower 20/40/80/160MHz 5GHz Upper 20/40/80MHz
<b>DFS Support (region dependent)</b>	5GHz Lower 52-64 5GHz Upper 100-144
<b>Antennas</b>	4 x 5GHz 2 x 2.4GHz & 5GHz shared

### Interfaces and physical attributes

<b>WiFi Radio Configuration</b>	Tri-band operation with: 4x4 5GHz Lower, 2x2 5GHz Upper, & 2x2 2.4GHz
<b>WiFi Capacity</b>	AX6600, Tri-band with 160MHz
<b>Ethernet</b>	1 x 2.5GbE and 1 x GbE
<b>Plug Type</b>	North America, Japan, EU, and UK
<b>Color</b>	Silver, Champagne

### Protocols

<b>Authentication</b>	WPA2-PSK and WPA3-SAE
<b>Encryption</b>	AES and PSK with KRACK fix
<b>Operating Modes</b>	Router with NAT/Firewall or Bridge
<b>Firewall and Networking</b>	SPI, NAT, and DHCP server IPv4 and IPv6 hybrid support
<b>Prioritization</b>	Queue processing based on traffic flow type
<b>Home SSIDs</b>	Managed 2.4GHz/5GHz Single SSID
<b>Guest Access</b>	Custom password ACL with HomePass Access
<b>Community SSID</b>	Managed 2.4/5GHz Single SSID with GRE tunnel
<b>ACL</b>	MAC, IP, and application control
<b>Certification</b>	FCC, CE, UL, IC, ROHS, PROP 65, REACH, WEEE BT SIG, WFA WiFi Certification

### Operating conditions

<b>Power Consumption</b>	100-240VAC, 50-60Hz Idle: 6W Average (25% duty cycle): 10W Peak power (75% duty cycle): 18W
<b>Operating Temperature</b>	0 °C to 40 °C
<b>Operating RH</b>	10% to 90% RH non-condensing
<b>Storage Conditions</b>	-20 °C to 70 °C 10 to 90% RH non-condensing

## Why partner with Plume?

Our services are proven to help CSPs reduce costs while increasing operational efficiency.\*

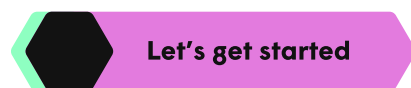
 **60+**  
NPS

 **67%**  
Truck rolls

 **\$15**  
Monthly ARPU

 **200%**  
ROI

\*Data based on an average taken across Plume's deployed CSP customer base.



© 2021 Plume Design, Inc. All rights reserved. Plume, Powered by Plume, Powered by Plume HomePass, Plume IQ, SuperPod, PowerPod, HomePass, OpenSync, Adapt, Control, Guard, Sense, Thrive, Haystack, Panorama, Signal, Frontline, Harvest, Clarity, Crusade, and Generate are trademarks or registered trademarks of Plume Design, Inc. Other company and product names are used for informational purposes only and may be trademarks of their respective owners.

Distribution partner

