

## Insight Managed WiFi 6 AX3000 Dual-Band Multi-Gig PoE Wireless Access Point



WAX618

### High Performance WiFi 6 Access Points for the Commercial and Residential Integrators

The WAX618 is a high performance WiFi 6 access point, ideal residential and commercial integration projects. The access point is a dual band 2x2 design delivering up to 3Gbps total WiFi throughput, supported by a 2.5Gbps Power-over-Ethernet port, an industry leader of performance and cost effectiveness in its product class.

The WAX618 supports the next generation WiFi 6 smart phones, IoT devices, and notebook computers. The WAX618 WiFi is based on WiFi 6 Release 2 technology, featuring 160MHz channelization on 5GHz band, delivering 100% more throughput than designs based on WiFi 6 Release 1. Compared to WiFi 5 access points, the WAX618 provides 4x the client device connection, allowing for better speed and less congestion.

The WAX618 is ideal in high density client device environments such as schools, hotels, restaurants and conference centers, and provides enterprise grade WiFi network security. With Insight management, WAX618 works seamlessly with your current NETGEAR Insight managed switches, WiFi access points and network storage, and is compatible with previous generation WiFi devices (WiFi 5 802.11ac for example) and WiFi access points.

Enjoy a 4-year Insight subscription plus 4 years of ProSUPPORT, a 24/7 live expert technical support by phone, chat and email.

In the past several years, the WiFi industry has made progress in increasing speeds by leaps and bounds. However, capacity continues to be a challenge, namely, supporting a large number of concurrent users. Rather, it is providing network connectivity to a large number of client devices, with good throughput, stable connection, and robust responses to environmental changes that is most important.

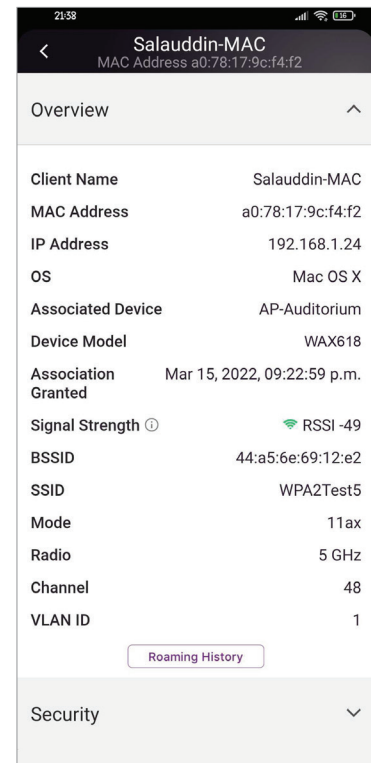
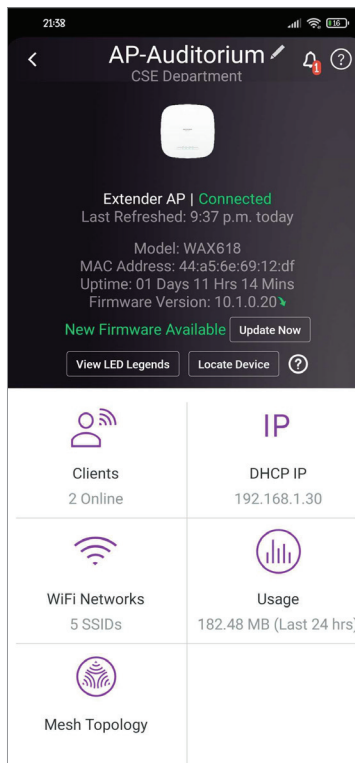
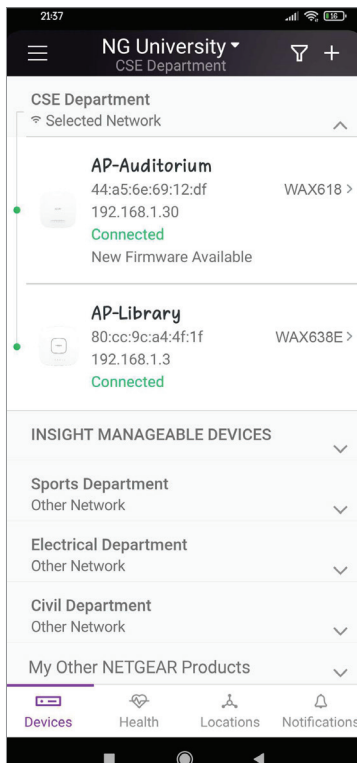
With the updated WiFi 6 (802.11ax) technology such as OFDMA, upstream and downstream MU-MIMO, and increased speeds, coverage, and capacity, you can feel confident that you're getting the highest performance WiFi that's set for years to come! Plus the assurance that you can now add more connected devices on your WiFi network without any slowdowns or blind spots.

The WAX618, a WiFi 6 access point, combined with Insight, helps integrators with a way to remotely manage their client's network, providing seamless WiFi connection and satisfied client experiences. NETGEAR empowers integrators with an all new WiFi 6 access point for high performance and high coverage for the years to come.

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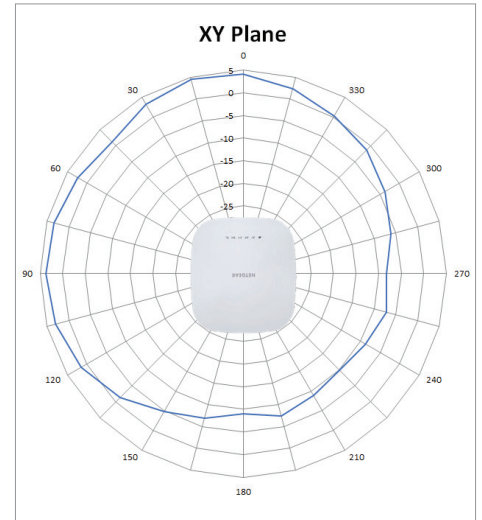
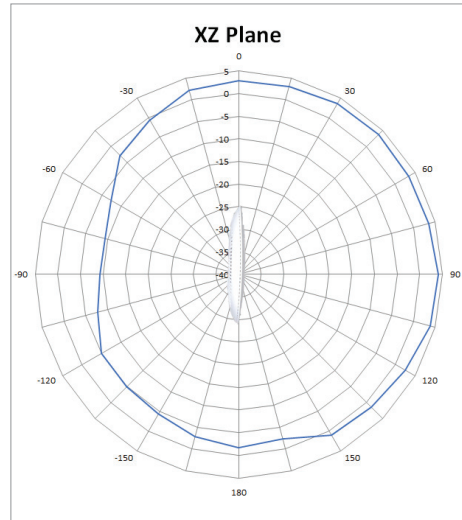
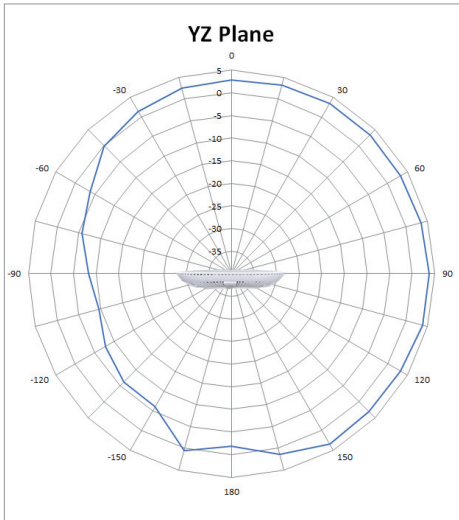
## High-end performance and unbeatable security for WiFi integration projects

- Business class WiFi based on next generation 802.11ax WiFi 6 technology on both 5GHz and 2.4GHz bands. (Backward compatible to 802.11b/g/n/a/ac)
- Dual-band 2x2 (2.4GHz and 5GHz) 4 streams of data for an aggregate throughput of up to 3Gbps
- Instant WiFi Mesh forming wireless backhaul with other WAX618, WAX628, or WAX638E units to form a WiFi mesh network
- 160MHz channelization on the 5GHz allows 100% more throughput than WiFi 6 Release 1 80MHz channelization
- 4 times more client device supported
- Enterprise security and Enhanced Open security, such as WPA3/WPA3 Enterprise, 8x SSID and VLAN
- Basic Service Set Coloring (BSS Coloring) enabling significant improvement in radio frequency channel efficiency and reduction of interference
- Orthogonal Frequency Division Multiple Access (OFDMA) allowing simultaneous services to multiple devices in the same channel thus improving bandwidth efficiency and reducing latency
- 2.5GbE port, backward compatible with 100/1000Mbps Ethernet, supported by NETGEAR GSM4210P, MS510TXPP and other multi-gig Ethernet switches
- Target Wake Time (TWT) allows more efficient power usage resulting in longer battery life in WiFi 6 client devices
- Beamforming+; Advanced 6th generation WiFi technology such as up and downstream MU-MIMO
- One 802.3at 2.5Gbps PoE port: Remote management and monitoring from NETGEAR Insight app or Cloud portal for unrivaled management experience of your wireless network
- App managed for faster installation through NETGEAR Insight app or Cloud portal with no additional hardware needed
- Market leading 5-year warranty with 24/7 chat support for peace of mind

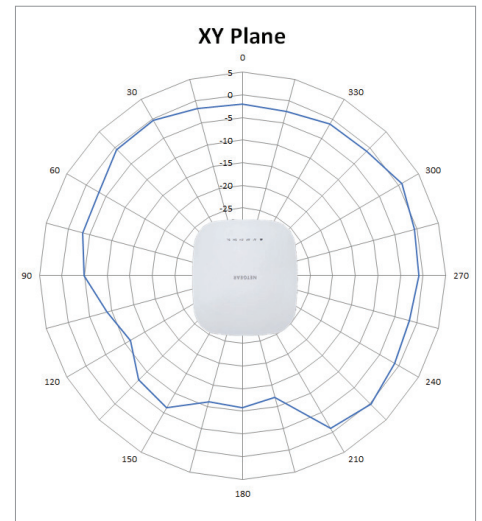
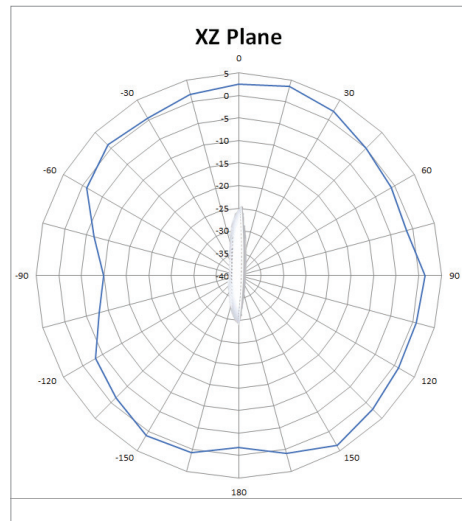
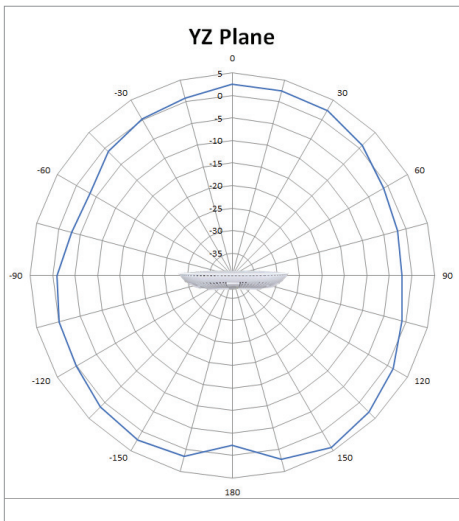


## Radio Patterns for WAX618

### Radio Pattern for 2.4GHz

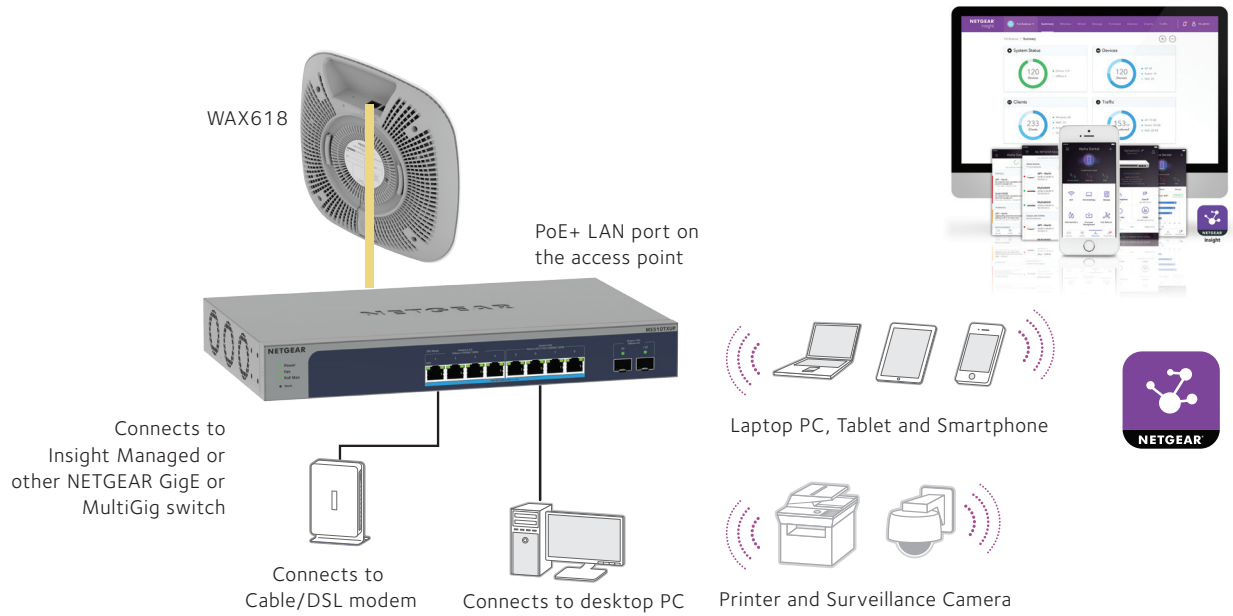


### Radio Pattern for 5GHz



## Example Application

### WAX618 Deployment Scenario



# Insight Managed WiFi 6 AX3000 Dual-Band Multi-Gig PoE Wireless Access Point

## Product Comparison

Product Comparison	WAX618	WAX628	WAX638E
WiFi Standards	5GHz: 802.11a/n/ac/ax 2.4GHz: 802.11b/g/n/ax	5.0GHz: 802.11a/n/ac/ax 2.4GHz: 802.11b/g/n/ax	6.0GHz: 802.11ax 5.0GHz: 802.11a/n/ac/ax 2.4GHz: 802.11b/g/n/ax
Wireless Mode (Transmit x Receive)	2x2 in 5GHz 2x2 in 2.4GHz	4x4 in 5.0GHz 2x2 in 2.4GHz	2x2 in 6.0GHz 4x4 in 5.0GHz 2x2 in 2.4GHz
Channelization	5GHz: 20/40/80/160MHz 2.4GHz: 20/40MHz	5GHz: 20/40/80 /160MHz 2.4GHz: 20/40MHz	5GHz: 20/40/80/160MHz 6GHz: 20/40/80/160MHz 2.4GHz: 20/40MHz
OFDM/OFDMA	OFDM and OFDMA	OFDM and OFDMA	OFDM and OFDMA
BSS Coloring	Yes	Yes	Yes
Multi-User MIMO	Bidir MU-MIMO	Bi-dir MU-MIMO	Bi-dir MU-MIMO
Target Wake Time (TWT) <sup>2</sup>	Yes	Yes	Yes
Maximum Theoretical Throughput	AX3000 3Gbps	AX5400 5.4Gbps	AXE7800 7.8Gbps
Maximum Theoretical Throughput per Band	5GHz: 2400Mbps 2.4GHz: 600Mbps	5.0GHz: 4800Mbps 2.4GHz: 600Mbps	6.0GHz: 2400Mbps 5.0GHz: 4800Mbps 2.4GHz: 600Mbps
Antenna Gain	Internal 2.9/2.8dBi (2.4GHz/5GHz)	Internal 2.5/3.0 dBi (2.4GHz/5GHz)	Internal 4.4/6.3/3.1 dBi (2.4GHz/5GHz/6GHz)
Power over Ethernet (PoE)	802.3at /af	802.3at/af	802.3bt/at
Coverage	2,500 sq.ft. (230m <sup>2</sup> )	3,000 sq.ft. (275m <sup>2</sup> )	3,000 sq.ft. (275m <sup>2</sup> )
PoE Power Consumption	21.2W	21.2W	27.64W
Centralized Management	Insight App	Insight App	Insight App
Secure Socket Layer (SSL)	Yes	Yes	Yes
Router Mode	No		
<b>Wireless Distribution System (WDS)</b>			
Repeater	Yes	Yes	Yes
Bridge Point-to-point/Multi-point	Yes	Yes	Yes
Simultaneous Bridge and Wireless Client Association	Yes	Yes	Yes
<b>Security</b>			
WiFi Protected Access (WPA/WPA2/WPA3), 802.11i	Yes	Yes	Yes
MAC address filtering with access control	Yes	Yes	Yes
802.1x RADIUS support with EAP TLS, TTLS, PEAP	Yes	Yes	Yes
Neighbor AP detection	Yes	Yes	Yes
Block SSID Broadcast	Yes	Yes	Yes
VLAN Support	Yes	Yes	Yes
Guest Network/Captive Portal	Yes	Yes	Yes
Bandwidth management	Yes	Yes	Yes
Link Layer Discovery Protocol	Yes	Yes	Yes
Bandsteering	Yes	Yes	Yes
<b>Instant WiFi Mesh</b>			
Wireless backhaul to form Mesh Network	Yes	Yes	Yes

# Insight Managed WiFi 6 AX3000 Dual-Band Multi-Gig PoE Wireless Access Point

## Technical Specifications

Standards	WAX618
IEEE 802.11ax WiFi 6 standard	Yes
WMM Wireless Multimedia Prioritization	Yes
WDS Wireless Distribution System	Yes
Power over Ethernet (PoE) IEEE 802.3af	Yes, approximately 60% of full throughput performance
Power over Ethernet (PoE) IEEE 802.3at	Yes
OFDM/OFDMA	Yes
Physical Specifications	
Dimensions W x D x H	9.5 x 9.5 x 1.58 in (241.5 x 241.5 x 40.2 mm)
Weight	727 g (1.6 lb)
Environmental Specifications	
Operating temperature	0° to 40°C(32° to 104°F)
Physical Interfaces	
Interface	One 100/1000/2.5GBASE-T Gigabit Ethernet (RJ-45) ports with Auto Uplink™ (Auto MDI-X) supporting IEEE 802.3af or 802.3at Power over Ethernet (PoE)
Power adapter (not included)	12V DC, 2.5A; plug is localized to country of sale
LED	Four (4): Power and cloud connection; LAN speed; 2.4GHz status; 5GHz status
Security	
WiFi Protected Access® (WPA, WPA2, WPA3)	Yes
WPA2 and WPA3 Enterprise	Yes
Wireless access control to identify authorized wireless network devices	Yes
MAC address authentication	Yes
Network Management	
NETGEAR Insight App	App management for setup, monitoring and management
Advanced Wireless	
Wireless Distribution System (WDS)	Bridge mode: Point-to-point wireless Bridge mode: Point-to-multipoint wireless Repeater mode Adjustable Transmit Power Control (TPC) Device detection Identify type of wireless clients in the network

# Insight Managed WiFi 6 AX3000 Dual-Band Multi-Gig PoE Wireless Access Point

## Technical Specifications

Package Contents	WAX618
	WAX618 Insight managed wireless access point Wall/ceiling mount kit Installation guide
Warranty and Support	
Hardware Limited Warranty	5 years
Next-Business-Day (NBD) Replacement	5 years
Technical support (online, phone)	90 days free from date of purchase*
ProSUPPORT OnCall 24x7 Service Packs (This NETGEAR product comes with 4 years of Insight remote management subscription and 4 years of our ProSupport OnCall 24x7 Service Pack.**)	PMB0312-10000S, 1 year PMB0332-10000S, 3 years PMB0352-10000S, 5 years
Ordering Information	
WAX618-111APS	Asia Pacific
WAX618-111EUS	Europe
WAX618-111NAS	US
Compatible Power Adapters from NETGEAR	
PAV12V-100AUS	Australia and New Zealand
PAV12V-100EUS	Europe except UK
PAV12V-100NAS	US and Canada
PAV12V-100PRS	China
PAV12V-100UKS	UK

\*This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and covers unmodified hardware, fans and internal power supplies - not software or external power supplies, and requires product registration using the Insight mobile app or Insight Cloud portal within 90 days of purchase; see <https://www.netgear.com/about/warranty> for details. Intended for indoor use only.

\*\*The NETGEAR OnCall 24x7 contract provides unlimited phone, chat and email technical support for your networking product.

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