



WAX620

## High Performance WiFi 6 Access Points for the Small and Medium Size Businesses

The WAX620 is a high performance WiFi 6 access point, ideal for small and medium sized businesses. The access point is a dual band 4x4 design delivering up to 3.6Gbps 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 WAX620 supports the next generation WiFi 6 smart phones, IoT devices, and notebook computers, delivering up to 40% more throughput to each individual device in the 5GHz band and 100% more throughput in the 2.4GHz band, compared to the previous generation equivalent model; provides 4x the client device connection, allowing businesses to serve more customers with better speed and less congestion.

The WAX620 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, WAX620 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 1-Year Insight subscription included with WAX620.

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. This requirement is particularly acute for businesses, where very high throughput to each individual device may not be the paramount requirement. 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 business WiFi network without any slowdowns or blind spots.

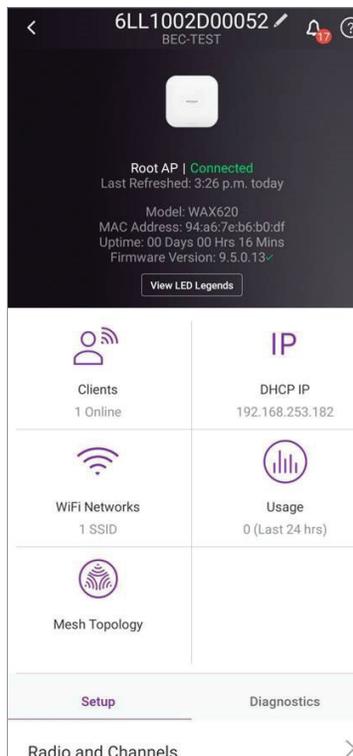
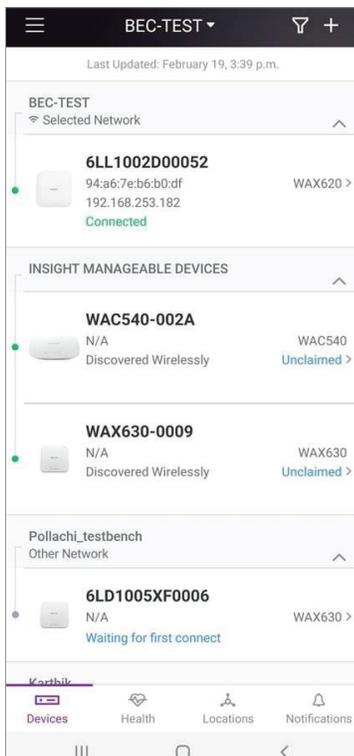
The WAX620, a WiFi 6 Business Access Point, combined with Insight, helps small and medium businesses with an easy way to manage their network without an IT expert, providing great WiFi connection leaving each of their customers satisfied as a network user. NETGEAR empowers businesses with an all new WiFi 6 Business Access Point for high performance and high coverage for the years to come.

The WAX620 is compatible with WAC510, WAC564, WAX610, WAX610Y Insight Managed Access Points to form a scalable wireless network.

## Business Features for higher speed, greater coverage and higher density WiFi

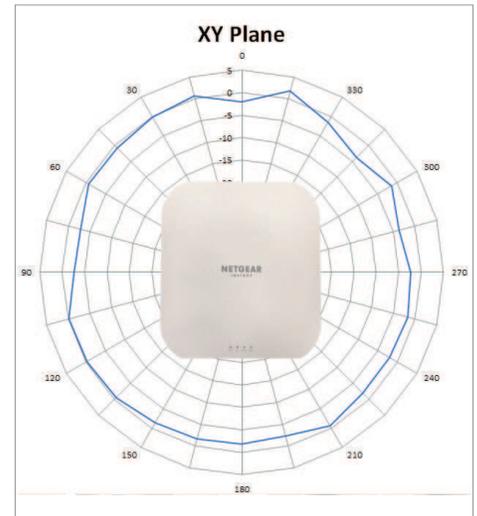
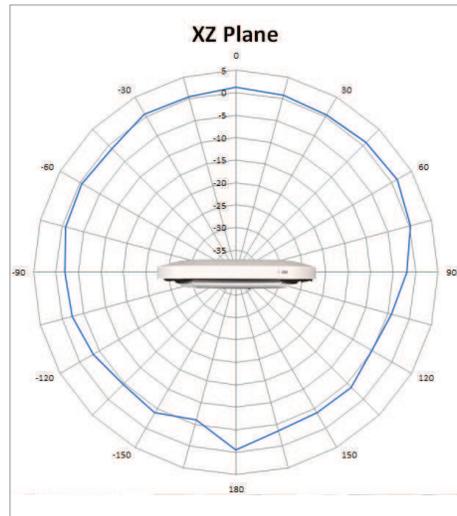
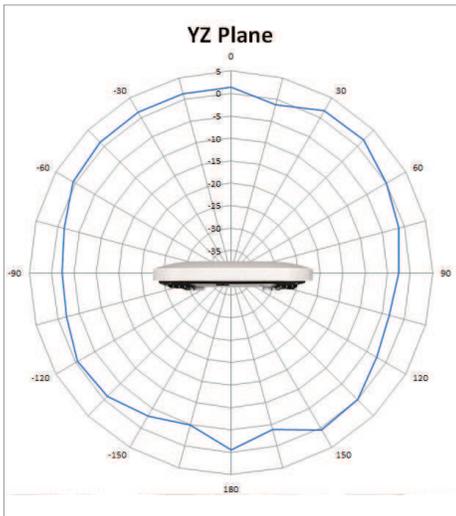
- Business class WiFi based on next generation 802.11ax WiFi 6 technology on both 5.0GHz and 2.4GHz bands. Backward compatible to 802.11b/g/n/a/ac
- Dual band 4x4 (2.4GHz and 5.0GHz) 8 streams of data for an aggregate throughput of up to 3.6Gbps
- Instant WiFi Mesh forming wireless backhaul with other WAX620, WAC540 or WC564 units to form a WiFi mesh network
- 40% more throughput in 4-stream 5.0GHz band and 100% more throughput in 4-stream 2.4GHz band compared to previous generation
- 4 times more client device supported
- Enterprise security and Enhanced Open security, such as WAP3, WPA Enterprise, 8x SSID and VLAN<sup>1</sup>
- 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. Faster installation through NETGEAR Insight app or Cloud Portal. No additional hardware needed.
- Market leading 5-year warranty with 24x7 chat support for peace of mind

<sup>1</sup> WPA Enterprise will be available in a future software upgrade.

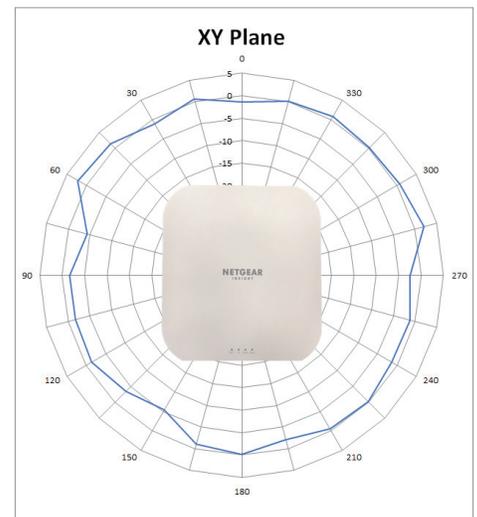
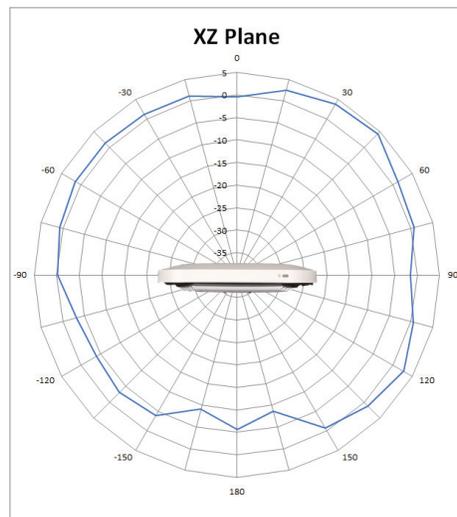
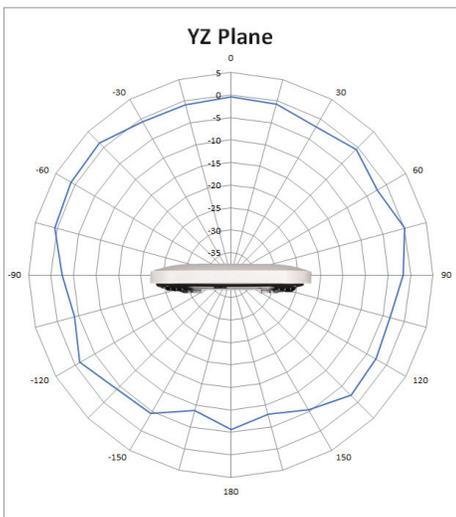


## Radio Patterns for WAX620

### Radio Pattern for 2.4GHz

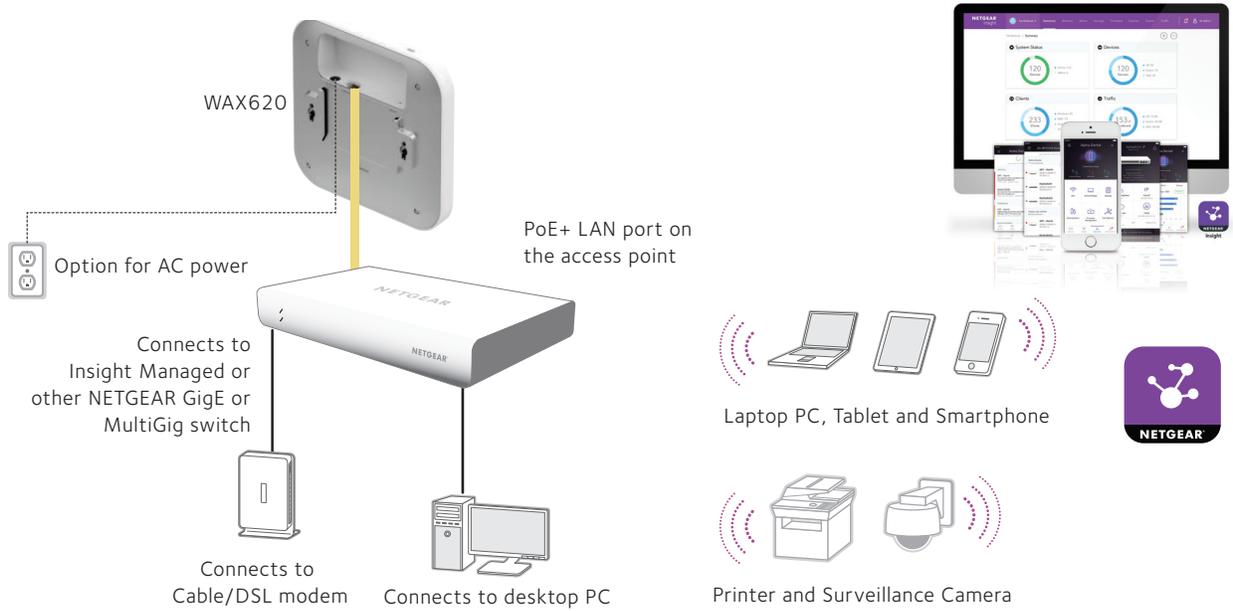


### Radio Pattern for 5GHz



## Example Application

### WAX620 Deployment Scenario



## Product Comparison

Product Comparison	WAC505	WAC510	WAX610	WAX620
WiFi Standards	5.0GHz: 802.11a/n/ac 2.4GHz: 802.11b/g/n	5.0GHz: 802.11a/n/ac 2.4GHz: 802.11b/g/n	5.0GHz: 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
Wireless Mode (Transmit x Receive)	2x2 in 5.0GHz 2x2 in 2.4GHz	2x2 in 5.0GHz 2x2 in 2.4GHz	2x2 in 5.0GHz 2x2 in 2.4GHz	4x4 in 5.0GHz 4x4 in 2.4GHz
OFDM/OFDMA	OFDM	OFDM	OFDM and OFDMA	OFDM and OFDMA
BSS Coloring	No	No	Yes	Yes
Multi-User MIMO	MU-MIMO	MU-MIMO	Bidir and MU-MIMO	Bidir and MU-MIMO
Target Wake Time (TWT) <sup>2</sup>	No	No	Yes	Yes
Maximum Theoretical Throughput	AC1200 1.2Gbps	AC1300 1.3Gbps	AX1800 1.8Gbps	AX3600 3.6Gbps
Maximum Theoretical Throughput per Band	5.0GHz: 866Mbps 2.4GHz: 300Mbps	5.0GHz: 866Mbps 2.4GHz: 400Mbps	5.0GHz: 1200Mbps 2.4GHz: 600Mbps	5.0GHz: 2400Mbps 2.4GHz: 1200Mbps
Antenna Gain	Internal 3/4dBi (2.4GHz/5GHz)	Internal 3/4dBi (2.4GHz/5GHz)	Internal 3.8/4.5dBi (2.4GHz/5GHz)	Internal 3.1/4.3 dBi (2.4GHz/5GHz)
Power over Ethernet (PoE)	802.3at/af	802.3at/af	802.3at/af	802.3at/af
PoE Power Consumption	9W	9.3W	15.3W	25.5W
Centralized Management	Insight App	Insight App	Insight App	Insight App
Secure Socket Layer (SSL)	Yes	Yes	Yes	Yes
Router Mode	No	Yes	No	No
<b>Wireless Distribution System (WDS)</b>				
Repeater	Yes	Yes	Yes	Yes
Bridge Point-to-point/Multi-point	Yes	Yes	Yes	Yes
Simultaneous Bridge and Wireless Client Association	Yes	Yes	Yes	Yes
<b>Security</b>				
WiFi Protected Access (WPA/WPA2/WPA3), 802.11i	Yes	Yes	Yes	Yes
MAC address filtering with access control	Yes	Yes	Yes	Yes
802.1x RADIUS support with EAP TLS, TTLS, PEAP	Yes	Yes	Yes	Yes
Neighbor AP detection	Yes	Yes	Yes	Yes
Block SSID Broadcast	Yes	Yes	Yes	Yes
VLAN Support	Yes	Yes	Yes	Yes
Guest Network/Captive Portal	Yes	Yes	Yes	Yes
Bandwidth management	Yes	Yes	Yes	Yes
Link Layer Discovery Protocol	Yes	Yes	Yes	Yes
Bandsteering	Yes	Yes	Yes	Yes
<b>Instant WiFi Mesh</b>				
Wireless backhaul to form Mesh Network	No	No	Yes	Yes

<sup>2</sup> Available in future firmware release, after initial launch in August, 2020.

## Technical Specifications

Standards	WAX610	WAX620
IEEE 802.11ax WiFi 6 standard	Yes	Yes
WMM Wireless Multimedia Prioritization	Yes	Yes
WDS Wireless Distribution System	Yes	Yes
Power over Ethernet (PoE) IEEE 802.3af	Yes, approximately 60% of full throughput performance	Yes, approximately 60% of full throughput performance
Power over Ethernet (PoE) IEEE 802.3at	Yes	Yes
OFDM/OFDMA	Yes	Yes
<b>Physical Specifications</b>		
Dimensions W x D x H	160.9 x 160.9 x 33.25 mm (6.33 x 6.33 x 1.30 in)	205.7 x 205.7 x 34.3 mm (8.09 x 8.09 x 1.35 in)
Weight	412 g (0.90 lb)	783 g (1.72 lb)
<b>Environmental Specifications</b>		
Operating temperature	0° to 40°C(32° to 104°F)	0° to 40°C(32° to 104°F)
<b>Physical Interfaces</b>		
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)	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)	12VDC, 2.5A; plug is localized to country of sale	12VDC, 2.5A; plug is localized to country of sale
LED	Four (4): Power and Cloud connection; LAN speed; 2.4GHz status; 5.0GHz status	Four (4): Power and Cloud connection; LAN speed; 2.4GHz status; 5.0GHz status
<b>Security</b>		
WiFi Protected Access® (WPA, WPA2, WPA3)		Yes
WPA2 Enterprise		Yes
Wireless access control to identify authorized wireless network devices		Yes
MAC address authentication		Yes
<b>Network Management</b>		
NETGEAR Insight App	App Management for setup, monitoring and management	
<b>Advanced Wireless</b>		
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	

## Technical Specifications

Package Contents	WAX620
	WAX620 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**	PMB0311-10000S, 1 year PMB0331-10000S, 3 years PMB0351-10000S, 5 years
Ordering Information	
WAX620-100NAS	US
WAX620-100EUS	Europe
WAX620PA-100NAS	US (Power adapter included)
Compatible Power Adapters from NETGEAR	
PAV12V-100NAS	US and Canada
PAV12V-100UKS	UK
PAV12V-100EUS	Europe except UK
PAV12V-100PRS	China
PAV12V-100AUS	Australia and New Zealand

\*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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