Insight

WA X630 E

## Next Gen 6GHz Tri-Band WiFi 6E Access Point for the Small and Medium Size Businesses

The WAX630E expands the NETGEAR Insight Cloud Managed Access Point products to offer a next generation tri-band access point that includes a new and ultra wide, ultra fast WiFi frequency band. The WAX630E is a 2.4GHz, 5GHz and 6GHz tri-band design delivering up-to 7.8Gbps total WiFi throughput, supported by a 2.5Gbps Power-over-Ethernet and a 1Gbps Ethernet ports, and industry leader of technology innovation and performance in its product class.

The WAX630E enables industry's next generation WiFi standard, WiFi 6 Release 2, or WiFi 6E, operating on 6GHz band, delivering unprecedented data throughput speed and available channels for WiFi connectivity with smartphones, IoTs, and computers.

The new 6GHz band provides up to 3.5 times more channels for WiFi communication, enabling the WAX630E to deliver faster speed, handling more client devices in a significantly less congested environment.

WiFi 6 Release 1 operates only in 2.4GHz and 5GHz bands, with 80MHz channelization in the 5GHz band. By contrast, WiFi 6 Release 2, or WiFi 6E, operates in 2.4GHz, 5GHz, and 6GHz bands, with 160MHz channelization in the 5GHz and 6GHz bands. By enabling the 160MHz channels, the WAX630E delivers 100% more speed in the 5GHz band than WiFi 6 Release 1 access points.

The WAX630E 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, WAX630E 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 WAX630E.
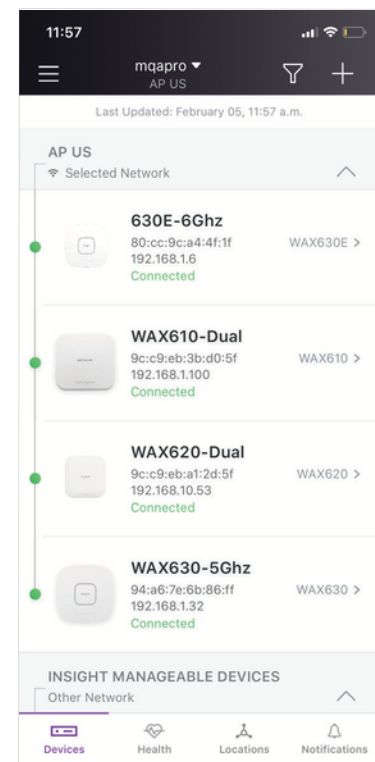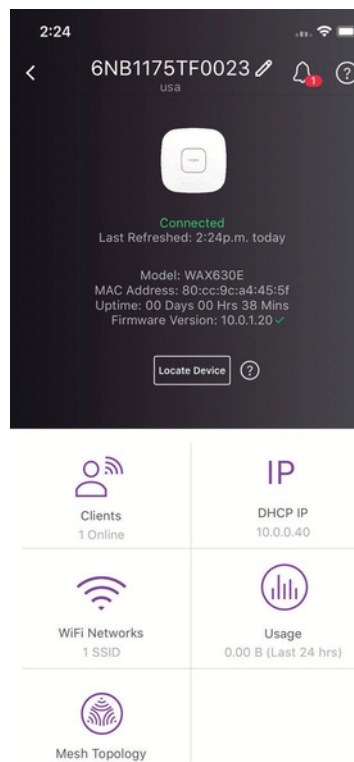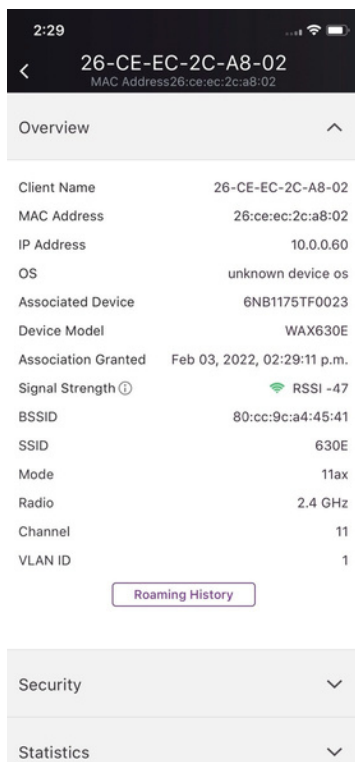
With the updated WiFi 6 (802.11ax) and WiFi 6E (802.11ax) technology such as OFDMA, upstream and downstream MU-MIMO, and increased speeds, coverage, and capacity, you can feel confident that you're getting the highest performance WiFi that's set for years to come! Plus the assurance that you can now add more connected devices on your business WiFi network without any slowdowns or blind spots.

The WAX630E, 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 WAX630E is compatible with other Pro WiFi Insight managed access points to form a scalable wireless network.
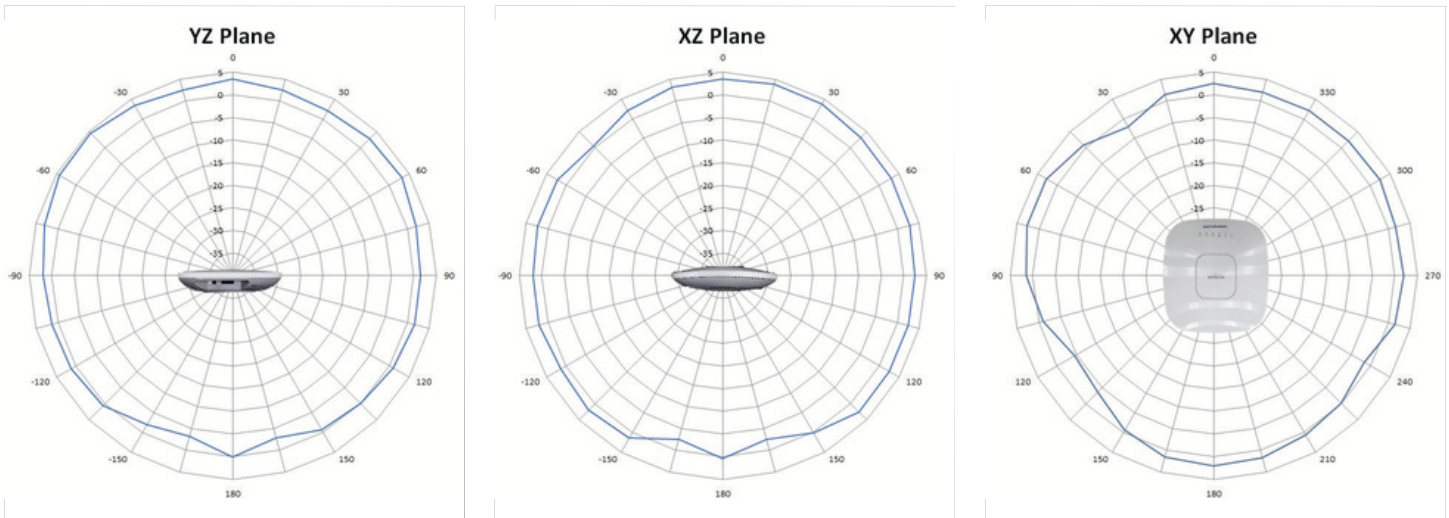
**NETGEAR®**
**BUSINESS**

# Business features for higher speed, greater coverage and higher density tri-band WiFi

• Business class WiFi based on next generation 802.11ax WiFi 6 technology on 6.0GHz, 5.0GHz and 2.4GHz bands. (Backward compatible to 802.11b/g/n/a/ac)

• Support 160MHz channelization in both 5GHz and 6GHz to deliver 200% throughput compared to previous generation

• Tri-band, 2.4GHz, 5.0GHz, 6.0GHz, 8 streams of data for an aggregate throughput of up to 7.8Gbps

• Instant WiFi Mesh forming wireless backhaul with other Pro WiFi Insight managed access points to form a WiFi mesh network

• 100% more throughput in 4-stream 5.0GHz band compared to previous generation

• 4 times more client device supported

• Enterprise security and Enhanced Open security, such as WPA3, WPA2 Enterprise, WPA3 Enterprise, 8x SSID, Dynamic VLAN and VLAN

• Basic Service Set Coloring (BSS Coloring) enabling significant improvement in radio frequency channel effeciency 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 MS510TXUP and other multi-gig Ethernet switches

• One additional 1GbE port for network redundancy or link aggregation to enhance reliability or throughput

• 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 802.3bt 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.

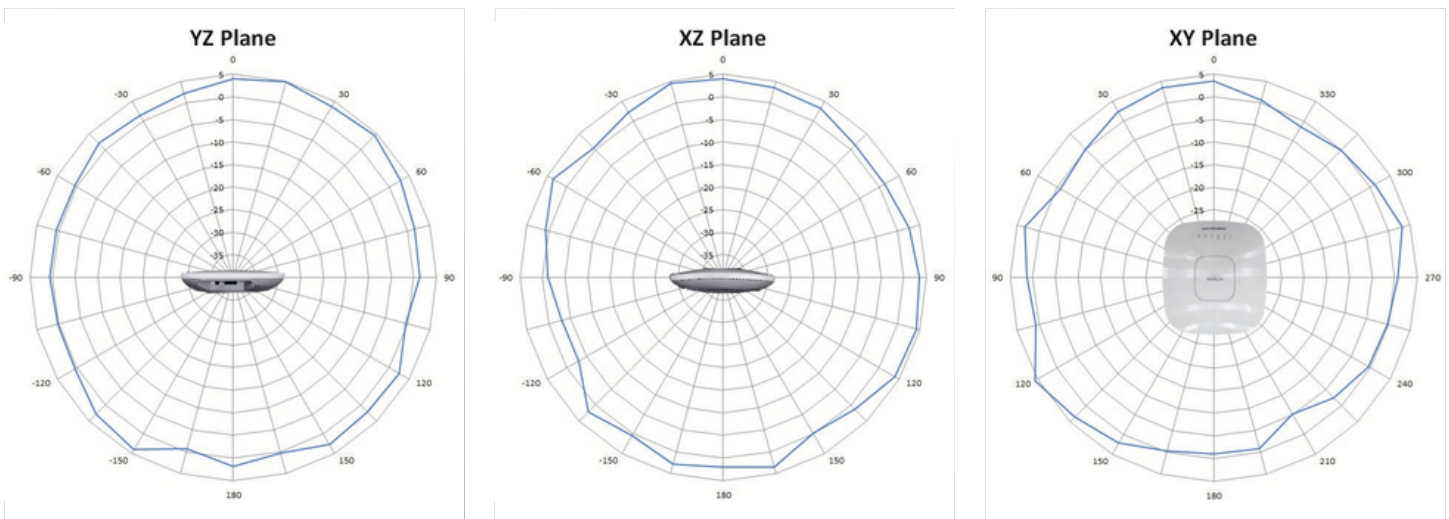• Market leading 5-year warranty with 24x7 chat support for peace of mind
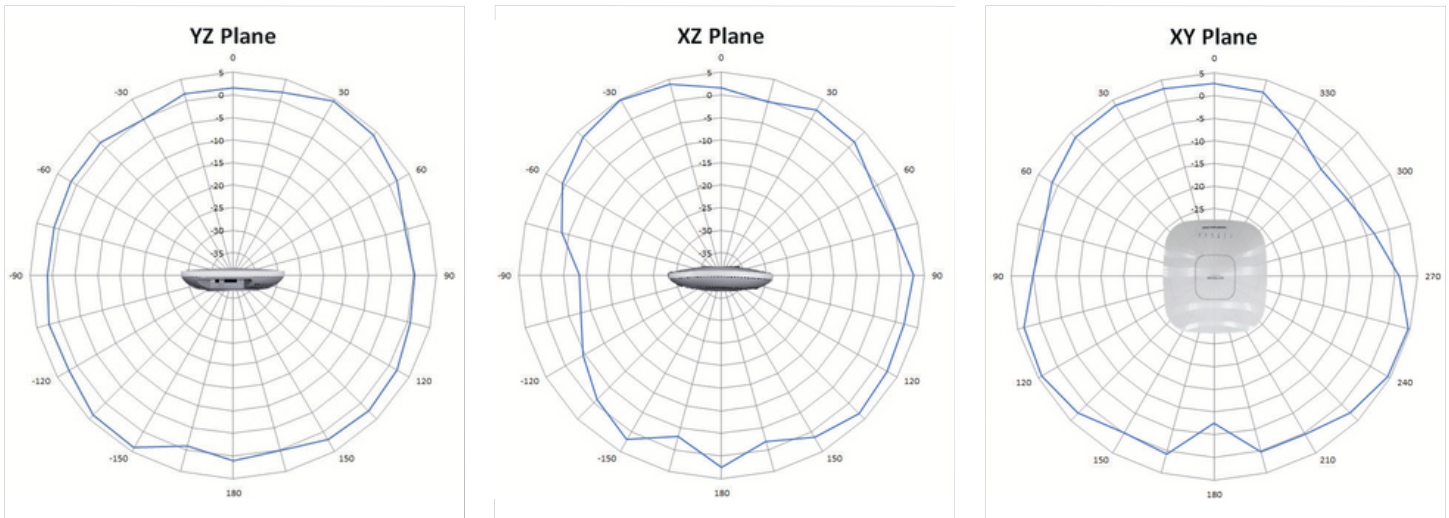
# Radio Patterns for WAX630E
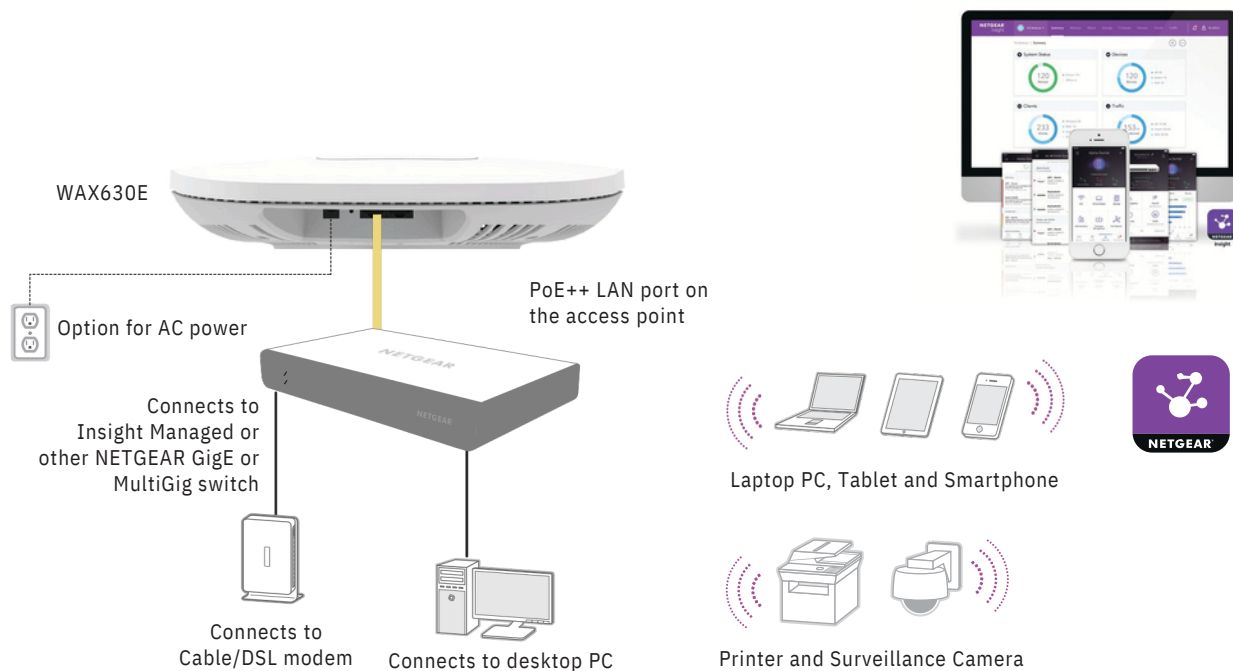
**Radio Pattern for 2.4GHz**



**Radio Pattern for 5GHz**

# Radio Patterns for WAX630E

**Radio Pattern for 6GHz**



YZ Plane



XZ Plane



XY Plane

# Example Application

**WAX630E Deployment Scenario**



WAX630E

Option for AC power

Connects to
Insight Managed or
other NETGEAR GigE or
MultiGig switch

PoE++ LAN port on
the access point

Connects to
Cable/DSL modem

Connects to desktop PC

Laptop PC, Tablet and Smartphone

Printer and Surveillance Camera

# Product Comparison

| Product Comparison | WAX610 | WAX620 | WAX630 | WAX630E |
|---|---|---|---|---|
| WiFi Standards | 5.0GHz: 802.11a/n/ac/ax<br>2.4GHz: 802.11b/g/n/ax | 5.0GHz: 802.11a/n/ac/ax<br>2.4GHz: 802.11b/g/n/ax | 5.0GHz: 802.11a/n/ac/ax<br>2.4GHz: 802.11b/g/n/ax | 6.0GHz: 802.11ax<br>5.0GHz: 802.11a/n/ac/ax<br>2.4GHz: 802.11b/g/n/ax |
| Wireless Mode (Transmit x Receive) | 2x2 in 5.0GHz<br>2x2 in 2.4GHz | 4x4 in 5.0GHz<br>4x4 in 2.4GHz | 4x4 in 5.0GHz H<br>4x4 in 5.0GHz L<br>4x4 in 2.4GHz | 2x2 in 6.0GHz<br>4x4 in 5.0GHz<br>2x2 in 2.4GHz |
| Channelization | 5GHz: 20/40/80MHz | 5GHz: 20/40/80MHz | 5GHz H: 20/40/80MHz<br>5GHz L: 20/40/80MHz | 5GHz: 20/40/80/160MHz<br>6GHz: 20/40/80/160MHz |
| OFDM/OFDMA | OFDM and OFDMA | OFDM and OFDMA | OFDM and OFDMA | OFDM and OFDMA |
| BSS Coloring | Yes | Yes | Yes | Yes |
| Multi-User MIMO | Bidir and MU-MIMO | Bidir and MU-MIMO | Bidir and MU-MIMO | Bidir and MU-MIMO |
| Target Wake Time (TWT) | Yes | Yes | Yes | Yes |
| Maximum Theoretical Throughput | AX1800 1.8Gbps | AX3600 3.6Gbps | AX6000 6Gbps | AXE7800 7.8Gbps |
| Maximum Theoretical Throughput per Band | 5.0GHz: 1200Mbps<br>2.4GHz: 600Mbps | 5.0GHz: 2400Mbps<br>2.4GHz: 1200Mbps | 5.0GHz H: 2400Mbps<br>5.0GHz L: 2400Mbps<br>2.4GHz: 1200Mbps | 6.0GHz: 2400Mbps<br>5.0GHz: 4800Mbps<br>2.4GHz: 600Mbps |
| Antenna Gain | Internal 3.8/4.5dBi<br>(2.4GHz/5GHz) | Internal 3.1/4.3 dBi<br>(2.4GHz/5GHz) | Internal 2.86/4.41/4.98 dBi<br>(2.4GHz/5GHz L/5GHz H) | Internal 4.4/6.3/3.1 dBi<br>(2.4GHz/5GHz/6GHz) |
| Power over Ethernet (PoE) | 802.3at/af | 802.3at/af | 802.3bt/at | 802.3bt/at |
| PoE Power Consumption | 15.3W | 25.5W | 30.1W | 27.64W |
| Centralized Management | Insight App | Insight App | Insight App | Insight App |
| Secure Socket Layer (SSL) | Yes | Yes | Yes | Yes |
| **Wireless Distribution System (WDS)** | | | | |
| 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 |
| **Security** | | | | |
| 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 |
| **Instant WiFi Mesh** | | | | |
| Wireless backhaul to form Mesh Network | Yes | Yes | Yes | Yes |

# Technical Specifications

| Standards | WAX610 | WAX620 | WAX630 | WAX630E |
|---|---|---|---|---|
| IEEE 802.11ax WiFi 6 standard | Yes | Yes | Yes | Yes |
| WMM Wireless Multimedia Prioritization | Yes | Yes | Yes | Yes |
| WDS Wireless Distribution System | Yes | Yes | Yes | Yes |
| Power over Ethernet (PoE) IEEE 802.3af | Yes, approximately 60% of full throughput performance | | No | No |
| Power over Ethernet (PoE) IEEE 802.3at | Yes | Yes | Yes, max throughput will reduce by 50% on 2.4GHz and 5GHz Low | Yes, max throughput will reduce by 50% on 2.4GHz |
| Power over Ethernet (PoE) IEEE 802.3bt | Yes | Yes | Yes | Yes |
| OFDM/OFDMA | Yes | Yes | Yes | Yes |
| **Physical Specifications** | | | | |
| 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) | 266.6 x 268.3 x 55.5 mm (10.49 x 10.56 x 2.18 in) | 266.6 x 268.3 x 55.5 mm (10.49 x 10.56 x 2.18 in) |
| Weight | 412 g (0.90 lb) | 783 g (1.72 lb) | 956 g (2.10 lb) | 1050 g (2.31 lb) |
| **Environmental Specifications** | | | | |
| Operating temperature | 0° to 40°C (32° to 104°F) | 0° to 40°C (32° to 104°F) | 0° to 40°C (32° to 104°F) | 0° to 40°C (32° to 104°F) |
| **Physical Interfaces** | | | | |
| Interface | One 100/1000/2.5GBASE-T Gigabit Ethernet (RJ-45) port with Auto Uplink™ (Auto MDI-X) supporting IEEE 802.3af, 802.3bt or 802.3at Power over Ethernet (PoE) | | One 100/1000/2.5G (IEEE 802.3at or 802.3bt doesn't support IEEE 802.3af) One 100/1000M Ethernet | |
| Power adapter (not included) | 12V DC, 2.5A; plug is localized to country of sale | | 12V DC, 3.5A; plug is localized to country of sale | |
| LED | One (1): Power and cloud connection; One (1): LAN port; Two (2): Radio (2.4GHz, 5GHz) | | One (1): Power and cloud connection; Two (2): LAN ports; Three (3): Radio (2.4GHz, 5GHz L, 5GHz H) | One (1): Power and cloud connection; Two (2): LAN ports; Three (3): Radio (2.4GHz, 5GHz, 6GHz ) |
| **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 | | | | |
| **Advanced Wireless** | | App management for setup, monitoring and management | | |
| Wireless Distribution System ( W DS) | | 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 | WAX630E |
|---|---|
| | WAX630E Insight managed wireless access point<br>Wall/ceiling mount kit<br>Installation guide |
| **Warranty and Support** | |
| Hardware Limited Warranty | 5 years 5 years |
| Next-Business-Day (NBD) Replacement | 90 days free from date of purchase* |
| Technical support (online, phone) | PMB0312-10000S, 1 year |
| ProSUPPORT OnCall 24x7 Service Packs** | PMB0332-10000S, 3 years<br>PMB0352-10000S, 5 years |

| Ordering Information | |
|---|---|
| WAX630E-100EUS | Europe and Asia Pacific |
| WAX630E-100NAS | US |
| WAX630EP-100NAS | US (Power adapter included) |