

AP320 INDOOR ACCESS POINT

3x3 MIMO, 802.11ac wave 1 support, 6 integrated antennas

2 Gigabit Ethernet ports, PoE power



WatchGuard's AP320 is perfect for busy environments and diverse client ecosystem and Wi-Fi requirement. This high-horsepower AP solution can support critical applications like voice, video, and cloud with ease. The AP320 has concurrent 5 GHz and 2.4 GHz band radios, 3 spatial streams, and data rates of up to 1.3 Gbps. Ideal for offices, classrooms, and meeting spaces.

"We've found that the dashboard within the WatchGuard Wi-Fi Cloud product has made it much easier for our limited IT staff to deploy new access points, to understand the functionality of the existing access points, and to understand the true needs of our guests."

~ Hunter Hughes, Director of IT, Museum of Flight

FLEXIBLE MANAGEMENT OPTIONS

You can manage AP320 access points with either a Firebox®, via the Gateway Wireless Controller with lightweight feature set, or with WatchGuard's Wi-Fi Cloud. And with the Wi-Fi Cloud you get an expanded set of features including strong WIPS security, marketing tools, and location-based analytics for optimal business insights.

PERFORMANCE WITHOUT COMPROMISE

Incorporating the latest 802.11ac standards, you'll have speeds of up to 1.3 Gbps over the air, without sacrificing security. When managed by the Wi-Fi Cloud, WatchGuard APs come standard with RF optimization, spectrum monitoring, and trouble-shooting built in.

UNIQUELY EFFECTIVE APPROACH TO SECURITY

Using patented Marker Packet technology, WatchGuard's cloud-managed WIPS (Wireless Intrusion Prevention System) defends your airspace from unauthorized devices, man-in-the-middle and denial-of-service attacks, rogue APs and more. As a dedicated WIPS sensor, the AP320 can be added to any existing Wi-Fi network for a powerful layer of patented security features simply unavailable in most AP devices.

ADVANTAGES OF CLOUD-BASED MANAGEMENT

WatchGuard's secure cloud-managed APs deliver the most comprehensive set of features for the price – including marketing tools for customizable user engagement and location-based analytics for enhanced business insights. With the WatchGuard Wi-Fi Cloud, IT pros can enjoy an entirely controller-less Wi-Fi management experience including setup, configuration, monitoring, troubleshooting, and improving corporate and guest Wi-Fi access, without worrying about the limitations of legacy controller infrastructure. Wi-Fi Cloud environments easily scale from one to an unlimited number of APs across multiple locations. APs can be grouped in many ways including location, building, floor, and customer to maintain consistent policies.

FEATURES & BENEFITS

- Horizontal (ceiling) or vertical (wall) mounting support included at no additional cost.
- Wi-Fi Cloud-enabled APs include integrated firewall, traffic shaping, QoS and BYOD controls per SSID
- Support for up to 8 individual SSIDs per radio allows for maximum flexibility in network design.
- AP320 devices can be converted to a dedicated security sensor with a single click for maximum wireless protection.
- Manage with Wi-Fi Cloud for expanded features including strong WIPS security, marketing tools and location-based analytics for enhanced business insights.
- Patented Marker Packet technology is used to accurately detect authorized, unauthorized, and external access points on any network with the fewest false positives in the industry.
- Supports self-healing and bridge-mode wireless meshing for optimal installation scenarios.

PHYSICAL SPECIFICATIONS

	Property	Specification
	Physical Dimensions	177mm × 155mm × 42mm
	Weight	0.82 lb. (0.37 kg)
	Operating Temperature	0°C to 40°C (32°F to 104°F)
	Storage Temperature	-40°C to 70°C (-40°F to 158°F)
	Humidity	5% to 95% non-condensing
	Max Associated Clients per AP*	254
	Max Concurrent Active Clients per AP*	75

<p>Rear View</p>	Port	Description	Connector Type	Speed/Protocol
	Power	This is a 12V DC input jack that can be used to power the device.	3.5 mm barrel	N/A
	Console	To establish 'Config Shell' terminal session via serial connection.	RJ-45	RS 232 Serial Bits per second: 115200 Data Bits: 8, Stop Bits: 1 Parity: None Flow Control: None
	LAN1	Gigabit Ethernet port used to connect to the wired LAN and communicate with the WatchGuard Cloud or Server. This port can also be used to power the device using the 802.3af Power over Ethernet (PoE) standard.	RJ-45	10/100/1000 Mbps Gigabit Ethernet 802.3af Class 0 PoE PoE input voltage: 48V
LAN2	Gigabit Ethernet port that can be used for wired extension for an SSID.	RJ-45	10/100/1000 Mbps Gigabit Ethernet	

	Port	Description	Connector Type	Speed/Protocol
	Reset	Reset to factory default settings	Pin-hole push-button	Hold down and power cycle the device to reset
	USB	Not in use	Not in use	Not in use

*Knowledge Base Article: https://watchguardsupport.secure.force.com/publicKB?type=KBArticle&SFDCID=ka22A000000HQObSAO&lang=en_US

WI-FI SPECIFICATIONS – Frequency, Modulation, and Data Rates

IEEE 802.11b/g/n			
Frequency Band	Scanning	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
	2400 ~ 2483.5 MHz	2400 ~ 2473.5 MHz	2400 ~ 2483.5 MHz
Modulation Type	DSSS, OFDM		
Data Rates	Up to 450 Mbps (MCS 0-23) with automatic rate adaptation		
Antenna	Integrated modular high efficiency PIFA omnidirectional antenna		

IEEE 802.11a/n/ac			
Frequency Band	Scanning	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
	4.92 ~ 5.08 GHz 5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.47 ~ 5.725 GHz 5.725 ~ 5.825 GHz	5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.725 ~ 5.825 GHz	5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.47 ~ 5.725 GHz
Dynamic Frequency Selection	DFS and DFS2		
Modulation Type	OFDM		
Data Rates	Up to 1.3 Gbps (MCS 0-9) for 11ac with automatic rate adaptation Up to 450 Mbps (MCS 0-23) for 11n with automatic rate adaptation		
Antenna	Integrated modular high efficiency PIFA omnidirectional antenna		

Maximum Transmit Power

For 5GHz	
MCS Index	Transmit Power(dBm)
802.11a (legacy)	
6Mbps	18
36Mbps	18
48Mbps	18
54Mbps	17
802.11n HT20 (legacy)	
MCS 0,1,2,3,4,8,9,10,11,12,16,17,18,19,20	18
MCS 5,13,21	18
MCS 6,14,22	18
MCS 7,15,23	17
802.11n HT40	
MCS 0,1,2,3,4,8,9,10,11,12,16,17,18,19,20	18
MCS 5,13,21	18
MCS 6,14,22	18
MCS 7,15,23	17
802.11ac 256QAM VHT80	
3/4 Code Rate	15
5/6 Code Rate	14

For 2.4GHz	
MCS Index	Transmit Power(dBm)
802.11g (legacy)	
6Mbps	20
54Mbps	18
802.11n HT20 (legacy)	
MCS 0/8/16	20
MCS 7/15	18
MCS 23	17
802.11n HT40	
MCS 0/8/16	20
MCS 7/15	17
MCS 23	16

Note:

The actual transmit power will be the lowest of:

- Value specified in the Device Template
- Maximum value allowed in the regulatory domain
- Maximum power supported by the radio

Country-Wise Max Transmit Powers (dBm)

Countries	2.4GHz	5Ghz
Australia	20	23
Canada	30	23
India	20	20
Israel	20	20
Japan	20	20
UAE	20	17
USA	20	23

Receive Sensitivity

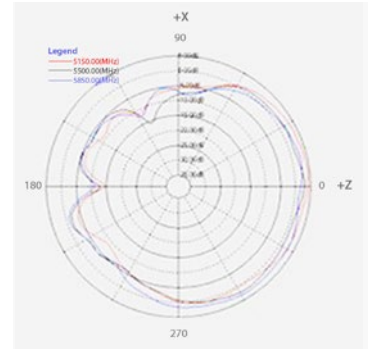
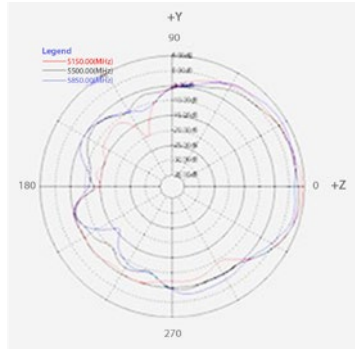
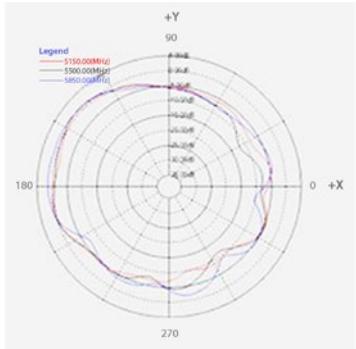
For 5GHz	
MCS Index	Receive Sensitivity
802.11a (legacy)	
6Mbps	-90
36Mbps	-77
48Mbps	-74
54Mbps	-72
802.11n HT20 (legacy)	
MCS 0,1,2,3,4,8,9,10,11,12,16,17,18,19,20	-90
MCS 5,13,21	-73
MCS 6,14,22	-71
MCS 7,15,23	-70
802.11n HT40	
MCS 0,1,2,3,4,8,9,10,11,12,16,17,18,19,20	-86
MCS 5,13,21	-69
MCS 6,14,22	-68
MCS 7,15,23	-67
802.11ac 256QAM VHT80	
HT20 MCS 8 @ 3/4 Code rate	-59
HT20 MCS 9 @ 5/6 Code Rate	-57
HT40 MCS 8 @ 3/4 Code Rate	-56
HT40 MCS 9 @ 5/6 Code Rate	-54
HT80 MCS 8 @ 3/4 Code rate	-53
HT80 MCS 9 @ 5/6 Code Rate	-51

For 2.4GHz	
MCS Index	Receive Sensitivity
802.11g (legacy)	
1Mbps	-95
6Mbps	-91
11Mbps	-87
54Mbps	-74
802.11n HT20 (legacy)	
MCS 0/8/16	-91
MCS 7/15/23	-70
802.11n HT40	
MCS 0/8/16	-87
MCS 7/15/23	-67

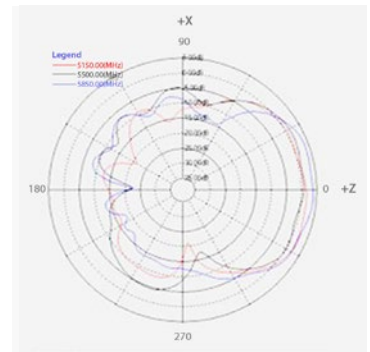
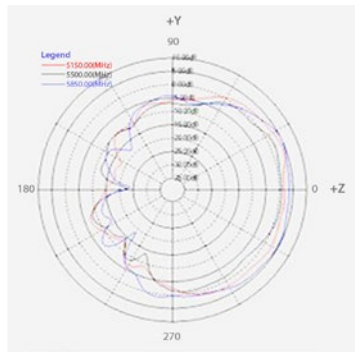
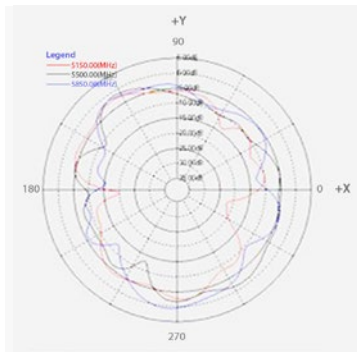
INTERNAL ANTENNA RADIATION PATTERNS

5 GHz

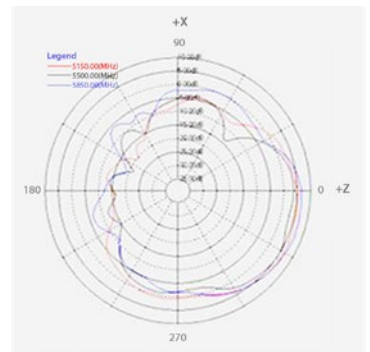
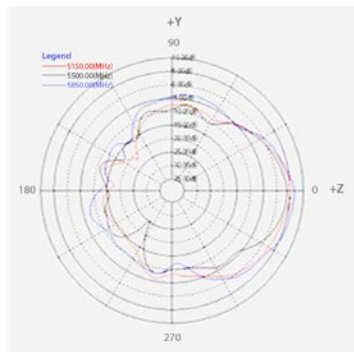
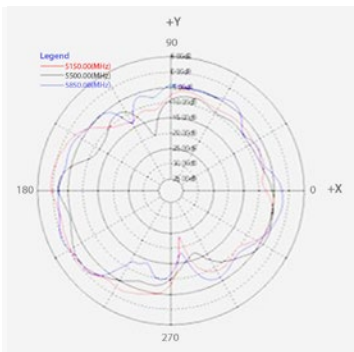
Antenna 1



Antenna 2

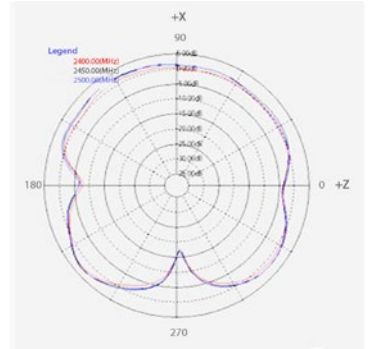
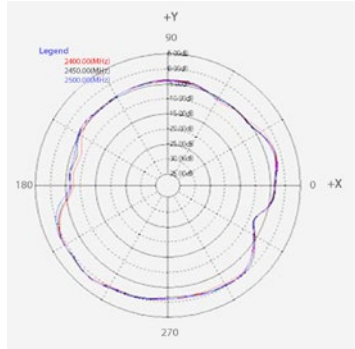
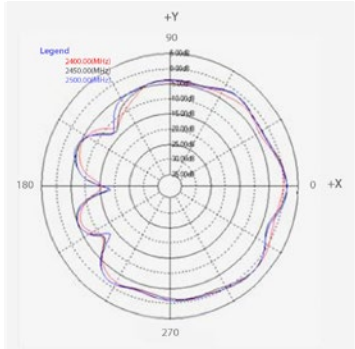


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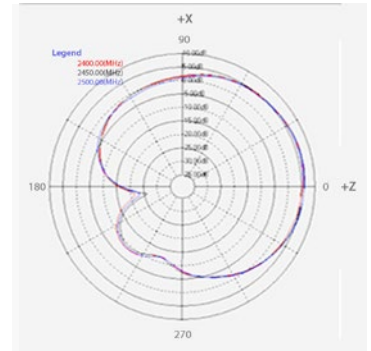
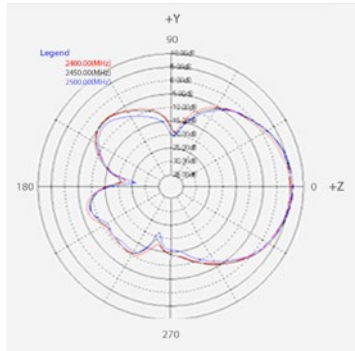
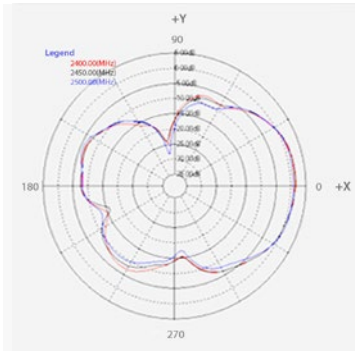


2.4 GHz

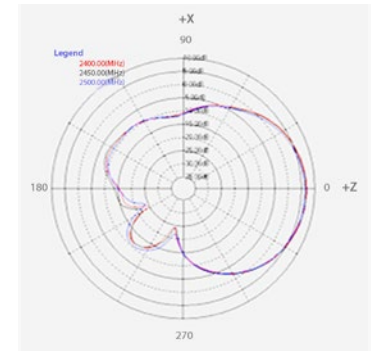
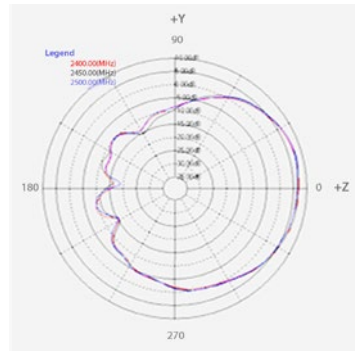
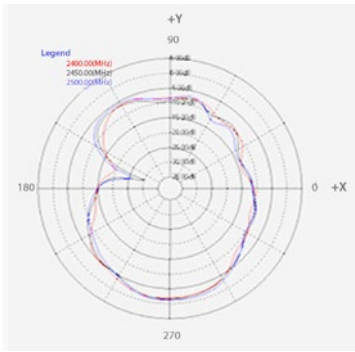
Antenna 1



Antenna 2



Antenna 3



Access Point Security Modes:

- WPA/WPA2 (802.11i) with TKIP or AES-CCMP encryption and PSK or 802.1x authentication
- Integrated WIPS background wireless scanning and Rogue AP prevention

WIPS Sensor Mode:

- Dedicated dual-band WIPS scanning for complete 24/7 protection from wireless threats

REGULATORY SPECIFICATIONS

RF and Electromagnetic

Country	Certification
USA	FCC Part 15.247, 15.407
Canada	IC
Europe	CE EN300.328, EN301.893 Countries covered under Europe certification: Austria, Belgium, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Iceland, Luxembourg, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Slovakia, Slovenia, Switzerland, The Czech Republic, UK.

Safety

Country	Certification
USA	UL 60950
Canada	cUL 60950
European Union (EU)	EN 60950, RoHS

About WatchGuard Technologies, Inc.

WatchGuard® Technologies, Inc. is a global leader in network security, providing best-in-class Unified Threat Management, Next Generation Firewall, secure Wi-Fi, and network intelligence products and services to more than 80,000 customers worldwide. The company's mission is to make enterprise-grade security accessible to companies of all types and sizes through simplicity, making WatchGuard an ideal solution for distributed enterprises and SMBs. WatchGuard is headquartered in Seattle, Washington, with offices throughout North America, Europe, Asia Pacific, and Latin America. To learn more, visit watchguard.com.

WATCHGUARD HAS YOU COVERED, INDOORS AND OUT

Secure, Simple, Intelligent Wi-Fi Solution

Choose from a family of cloud-ready secure wireless access points for delivering blazing fast Wi-Fi, without compromising your network.



The AP420 offers fast speeds and 4x4 MU-MIMO dual radio, connecting a crowded room full of devices simultaneously. A 3rd MIMO dual band radio is dedicated for WIPS and RF optimization, so there is no need to sacrifice performance for security. Ideal for tradeshow floors, auditoriums, meeting rooms, and shopping malls.

The AP322 is the right solution for the outdoors. This access point features a rugged IP67-compliant exterior and delivers broad, fast, and reliable Wi-Fi coverage. Designed to bring Wi-Fi to stadiums, schools, outdoor cafes, shipping docks, warehouses, and more, the AP322 has you covered.

The AP320 is perfect for busy environments with diverse client ecosystem and Wi-Fi requirements. This high-horsepower AP can support critical applications like voice, video, and cloud with ease. Common deployment scenarios include offices, classrooms, and meeting spaces.

The AP120 is built for networks with heavy smartphone and tablet access such as guest or public Wi-Fi environments, or smaller-footprint locations that support limited devices. Common deployment scenarios include branch offices, stores, and small classrooms.

For details, talk to your authorized WatchGuard reseller or visit www.watchguard.com.

AP320

