

# AP325 INDOOR ACCESS POINT

2x2:2 MU-MIMO, 802.11ac Wave 2 support

2 Gigabit Ethernet ports, 6 integrated antennas, PoE+ power



Secure your business with the latest 802.11 Wave 2 technology that meets your budget needs. The AP325 from WatchGuard is an indoor access point and comes equipped with Multi-User MIMO (MU-MIMO) connecting multiple devices at the same time – enhancing your secure Wi-Fi experience. This access point also offers dual concurrent 5 GHz and 2.4 GHz band radios supporting 802.11a/n/ac Wave 2, 802.11b/g/n, two spatial streams, and data rates of up to 867 Mbps and 300 Mbps, respectively. Common use cases include medium-density environments such as K-12 schools, small and midsize businesses, distributed office spaces, small-footprint retail, small meeting rooms, restaurants, and healthcare offices.

*“The new AP325 is a very cost-effective Wave 2 AP that fits my network’s needs for fast and secure Wi-Fi access perfectly. I’ve found the AP325 to be rock-solid in wireless connectivity, and the easy cloud-based management enabled me to add WIPS security protection without hassle.”*

*~ Bob Sampson, Heat of IT Wrest Park Ltd*

## UNIQUELY EFFECTIVE APPROACH TO SECURITY

The AP325 supports the only Wireless Intrusion Prevention System (WIPS) in the industry with high accuracy in classifying access points and client devices, properly enabling automatic prevention of Wi-Fi threats and keeping a network protected from wireless man-in-the-middle attacks, evil twins, honeypots, and more.

## FLEXIBLE MANAGEMENT OPTIONS

You can manage the AP325 with either a Firebox®, via the Gateway Wireless Controller and receive a lightweight feature set, or with WatchGuard’s Wi-Fi Cloud.

With the Wi-Fi Cloud you get an expanded set of features including patented security, marketing tools, and location-based analytics for optimal business insights. IT pros can also enjoy an entirely controller-less Wi-Fi management experience including setup, configuration, monitoring, troubleshooting, and improved 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 access points across multiple locations. Access points can be grouped in many ways including location, building, floor, and customer to maintain consistent policies.

## PERFORMANCE WITHOUT COMPROMISE

By incorporating the latest 802.11ac Wave 2 standards, you’ll have speeds of up to 867 Mbps over the air, without sacrificing security. With MU-MIMO, you get faster user experience, serving multiple devices (smartphones, tablets, laptops) at the same time, so more clients can utilize the network more efficiently.

## FEATURES & BENEFITS

- Wave 2 chipset offers the latest MU-MIMO technology to serve today’s medium-density environments
- AP325 takes less than two minutes to activate and configure after connecting to the Wi-Fi Cloud
- Support for up to eight individual SSIDs per radio allows for maximum flexibility in network design
- Smart steering automatically pushes clients with low speeds to a closer access point\*
- Band steering manages spectrum efficiency, pushing clients to 5 GHz channels for optimal throughput
- AP325 continues to scan for wireless threats and enforces security policy even if the connection with the Wi-Fi Cloud is interrupted\*

\*Must have Wi-Fi Cloud enabled with Secure Wi-Fi or Total Wi-Fi license.

**PHYSICAL SPECIFICATIONS**

	Property	Specification
	Physical Dimensions	196mm X 196mm X 43mm
	Weight	850g (1.87lb)
	Operating Temperature	0°C – 45°C (32°F to 113°F)
	Storage Temperature	-20°C – 65°C (-4°F – 149°F)
	Humidity	5% to 95% non-condensing
	Processor and RAM	Qualcomm IPQ4028 717 MHz quad-core ARM processor with 256 MB RAM and 64 MB Flash

	Port	Description	Connector Type	Speed/Protocol
	Reset	Reset to factory default settings	Pin hold push button	Hold down and power cycle the device to reset
	Power	12V DC/802.3at (PoE+)	3.5mm overall diameter/1.35mm center pin/hole	N/A
	LAN2	Gigabit Ethernet port that can be used for wired extension for an SSID	RJ-45	10/100/1000 Mbps Gigabit Ethernet
	LAN1/PoE	Gigabit Ethernet port used to connect to the wired LAN and communicate with the WatchGuard Wi-Fi Cloud or Server. This port can also be used to power the device using the 802.3at (PoE+)/802.3af (PoE) standard (limited functionality).	RJ-45	10/100/1000 Mbps Gigabit Ethernet 802.3af/at Class 0 PoE/PoE+ PoE input voltage: 48V If using PoE (802.3af): <ul style="list-style-type: none"> <li>• USB port and LAN2 port disabled</li> <li>• 2.4 GHz radio - 1x1 mode with 15 dBm transmit power</li> <li>• 5 GHz radio - 2x2 mode with 18 dBm transmit-power (15 dBm per chain)</li> </ul>

**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		
Peak Data Rates	Up to 300 Mbps (MCS 0-15)		
Antenna	Integrated modular high efficiency PIFA antenna x4 (x2 per band)		

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		
Peak Data Rates	Up to 867 Mbps (MCS 0-15)		
Antenna	Integrated modular high efficiency PIFA antenna x4 (x2 per band)		

Physical Specifications	
Antenna	Internal PIFA 2x2.4 GHz (2.5 dBi peak gain) 2x5 GHz (3.5 dBi peak gain) 2x2 dual band third radio (non-access)
Ethernet Ports	2 Gigabit Ethernet ports with RJ45 connector type. One port to connect to the wired LAN and communicate with the WatchGuard Wi-Fi Cloud. This port can also be used to power the device using the 802.3at (PoE+)/802.3af (PoE) (limited functionality). Second port can be used for aggregation or wired extension of an SSID.
Reset	Pinhole push button
LEDs	Power, LAN1, LAN2, 2.4 GHz, 5 GHz 1, 5 GHz 2

Operational Specifications	
Input Power	12V DC/1.5A (3.5mm overall diameter/1.35mm center pin/hole)/802.3at (PoE+)/802.3af (PoE) (limited functionality)
Number of Radios	3 WiFi Radios: One 2.4 GHz and 5 GHz radio each for simultaneous dual band client access. A third dual-band radio dedicated to non-access smart scanning; WIPS, RF optimization, remote troubleshooting, and network assurance functions.
MIMO	2x2 for 2.4/5GHz Radios
Number of Spatial Streams	2 for 2.4/5GHz Radios
RF Transmit Power	20 dBm per radio chain (max); Actual power for Tx will depend on Country Regulatory Domain
Power Consumption	Max: 19W Min: 11W Average: 16W
Simultaneous MU-MIMO Clients	Two 1x1 MU-MIMO clients
Users in a MU-MIMO group with a 2x2 client	1
Bandwidth Agility	Yes
Frequency Bands	2.4-2.4835 GHz, 4.9-5.0GHz, 5.15-5.25 GHz; (UNII-1), 5.25-5.35 GHz, 5.47-5.6 GHz, 5.650-5.725 GHz (UNII-2), 5.725-5.85 GHz (UNII-3)
Dynamic Frequency Selection	Supported in compliance to all latest amendments from FCC, CE, IC, CB, TELEC, KCC regarding certifications.

**Maximum Aggregate Transmit Power**

For 2.4GHz	
MCS Index	Transmit Power(dBm)
<b>802.11b</b>	
1Mbps - 11 Mbps	21
<b>802.11g</b>	
6 Mbps – 48 Mbps	21
54 Mbps	20
<b>802.11n HT20</b>	
MCS 0,1,2,3,4,5	21
MCS 6	20
MCS 7	19
<b>802.11n HT40</b>	
MCS 0,1,2,3,4,5	21
MCS 6	20
MCS 7	19

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

For 5GHz	
MCS Index	Transmit Power(dBm)
<b>802.11a</b>	
6 Mbps – 48 Mbps	21
54 Mbps	20
<b>802.11n HT20</b>	
MCS 0,1,2,3,4,5	21
MCS 6,7	20
<b>802.11n HT40</b>	
MCS 0,1,2,3,4,5	21
MCS 6	20
MCS 7	19
<b>802.11n VHT20</b>	
MCS 0,1,2,3,4,5	21
MCS 6,7	20
MCS 8	19
<b>802.11n VHT40</b>	
MCS 0,1,2,3,4,5	21
MCS 6,7	20
MCS 8	18
MCS 9	17
<b>802.11n VHT80</b>	
MCS 0,1,2,3,4,5,6,7	19
MCS 8	18
MCS 9	17

**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

Receive Sensitivity

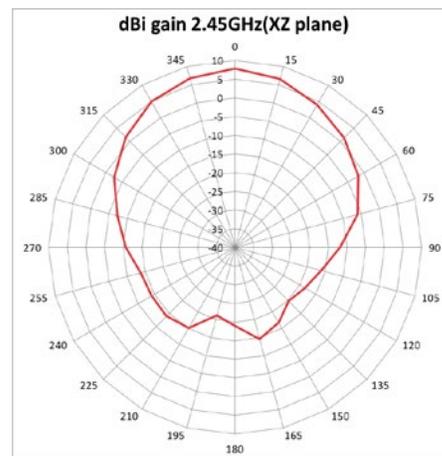
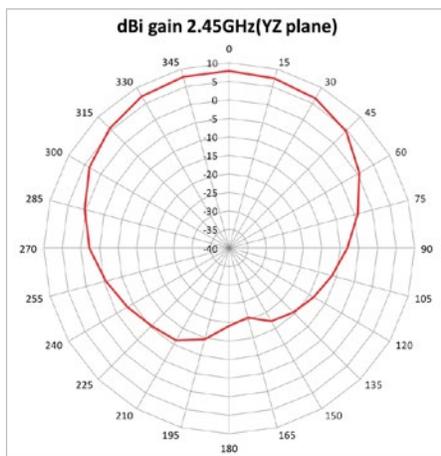
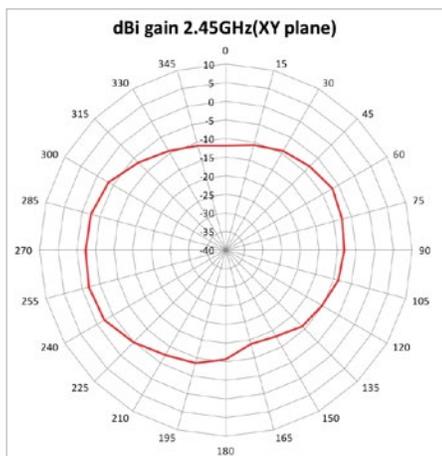
For 2.4GHz	
MCS Index	Receive Sensitivity (dBm)
<b>802.11g</b>	
6 Mbps	-94
24 Mbps	-86
36 Mbps	-83
48 Mbps	-78
54 Mbps	-77
<b>802.11n HT20</b>	
MCS 0,8	-93
MCS 1,9	-90
MCS 2,10	-88
MCS 3,11	-84
MCS 4,12	-81
MCS 5,13	-77
MCS 6,14	-74
MCS 7,15	-73
<b>802.11n HT40</b>	
MCS 0,8	-90
MCS 1,9	-87
MCS 2,10	-85
MCS 3,11	-81
MCS 4,12	-78
MCS 5,13	-74
MCS 6,14	-73
MCS 7,15	-71

For 5GHz	
MCS Index	Receive Sensitivity (dBm)
<b>802.11a</b>	
6 Mbps	-93
24 Mbps	-85
36 Mbps	-82
48Mbps	-77
54 Mbps	-76
<b>802.11n HT20</b>	
MCS 0,8	-92
MCS 1,9	-89
MCS 2,10	-86
MCS 3,11	-83
MCS 4,12	-80
MCS 5,13	-76
MCS 6,14	-74
MCS 7	-72
<b>802.11n HT40</b>	
MCS 0,8	-89
MCS 1,9	-86
MCS 2,10	-83
MCS 3,11	-80
MCS 4,12	-77
MCS 5,13	-73
MCS 6,14	-62

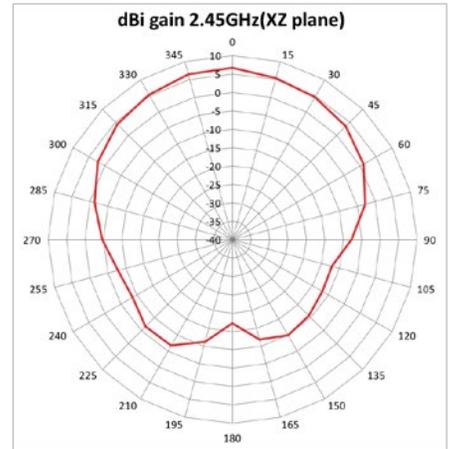
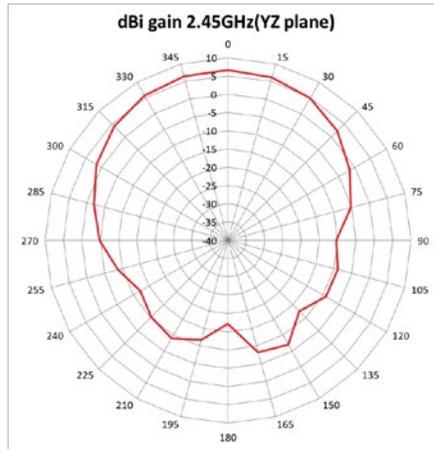
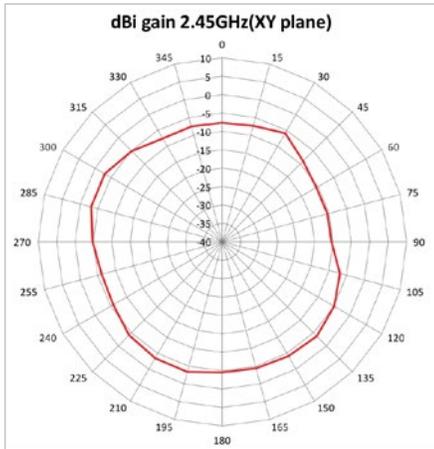
MCS Index	Receive Sensitivity (dBm)
<b>802.11n VHT20</b>	
MCS 0	-91
MCS 1	-88
MCS 2	-86
MCS 3	-83
MCS 4	-80
MCS 5	-75
MCS 6	-74
MCS 7	-72
MCS 8	-68
<b>802.11n VHT40</b>	
MCS 0	
MCS 1	
MCS 2	
<b>802.11n VHT80</b>	
MCS 0	-86
MCS 1	-83
MCS 2	-81
MCS 3	-78
MCS 4	-74
MCS 5	-70
MCS 6	-69
MCS 7	-67
MCS 8	-63

**INTERNAL ANTENNA RADIATION PATTERNS**

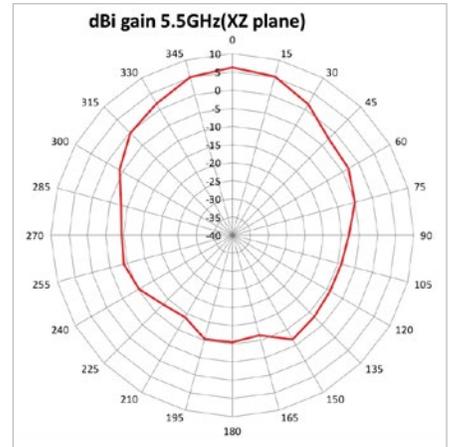
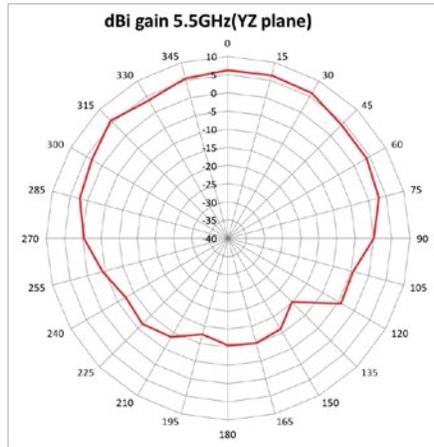
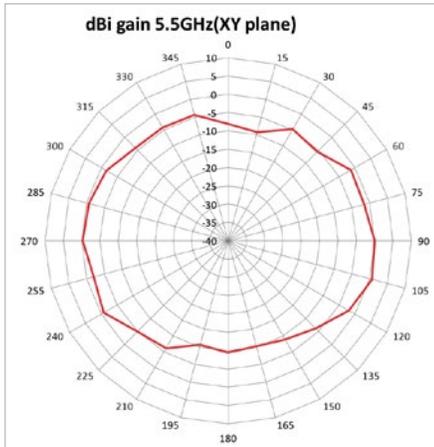
Radiation Pattern for 2GHz Antenna 1



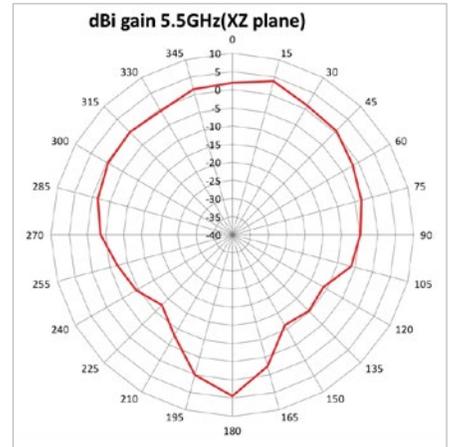
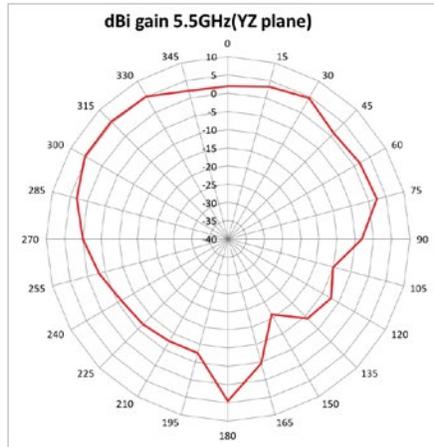
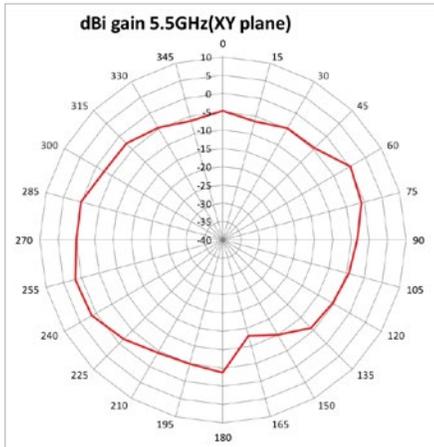
Radiation Pattern for 2GHz Antenna 2



Radiation Pattern for 5GHz Antenna 1



Radiation Pattern for 5GHz Antenna 2



## 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

**ORDERING INFORMATION**
**Access Point**

Part Number	Description
WGA35723	<b>WatchGuard AP325 and 3-yr Total Wi-Fi</b> Total Wi-Fi includes Wi-Fi Cloud license, Standard Support, WIPS, Engage Captive Portals, Analyze Location Analytics, and Go Mobile Web App
WGA35721	<b>WatchGuard AP325 and 1-yr Total Wi-Fi</b> Total Wi-Fi includes Wi-Fi Cloud license, Standard Support, WIPS, Engage Captive Portals, Analyze Location Analytics, and Go Mobile Web App
WGA35733	<b>WatchGuard AP325 and 3-yr Secure Wi-Fi</b> Secure Wi-Fi includes Wi-Fi Cloud license, Standard Support, and WIPS
WGA35731	<b>WatchGuard AP325 and 1-yr Secure Wi-Fi</b> Secure Wi-Fi includes Wi-Fi Cloud license, Standard Support, and WIPS
WGA35703	<b>WatchGuard AP325 and 3-yr Basic Wi-Fi</b> Basic Wi-Fi includes Firewall Gateway Wireless Controller license and Standard Support
WGA35701	<b>WatchGuard AP325 and 1-yr Basic Wi-Fi</b> Basic Wi-Fi includes Firewall Gateway Wireless Controller license and Standard Support

**Power Options**

Part Number	Description
WG8599 (US)	WatchGuard 802.3at PoE+ Injector with AC cord (US)
WG8600 (EU)	WatchGuard 802.3at PoE+ Injector with AC cord (EU)
WG8601 (UK)	WatchGuard 802.3at PoE+ Injector with AC cord (UK)
WG8602 (AU)	WatchGuard 802.3at PoE+ Injector with AC cord (AU)
WG8039	Power Supply for WatchGuard AP325

**Mounting Options**

Part Number	Description
WG8038	<b>Flat Surface Mount Kit</b> Flat surfaces (wall, hard ceiling) mount kit for WatchGuard AP325
WG8026	<b>T-grid Rails (9/16", 15mm) Mount Kit</b> Drop ceiling T-grid rails (9/16", 15mm) mount kit for WatchGuard AP325/AP420
WG8021	<b>T-grid Rails Interlude and Silhouette Mount Kit</b> Drop ceiling T-grid rails (interlude and silhouette) mount kit for WatchGuard AP325/AP420
WG8027	<b>T-grid Rails (15/16", 24mm) Mount Kit</b> Drop ceiling T-grid rails (15/16", 24mm) mount kit for WatchGuard AP325/AP420



**WATCHGUARD HAS YOU COVERED, INDOORS AND OUT**

No matter what your wireless battleground is – remote offices, guest Wi-Fi, corporate access, public hotspots, outdoor environments – WatchGuard has a range of access points to fit your business needs. WatchGuard’s Wi-Fi packages allow you to quickly and easily find the right set of features your business needs today...and tomorrow.

WatchGuard Wi-Fi Solution	Total Wi-Fi	Secure Wi-Fi	Basic Wi-Fi
Wi-Fi Cloud License	✓	✓	
Wireless Intrusion Prevention System (WIPS) Cloud-managed APs have built-in WIPS to help ensure you have the protection you need from malicious attacks and rogue APs	✓	✓	
Customer Engagement Tools Splash pages, social media integration, surveys, coupons, videos, and so much more	✓		
Location-based Analytics Know how and when visitors are using your Wi-Fi, customizable reports and alerts for real-time and historical usage data	✓		
GO Mobile Web App Easily set-up your network and configuration from any mobile device	✓		
Firebox Gateway Wireless Controller			✓
Standard 24x7 Support Hardware warranty with advance hardware replacement, customer support, and software updates	✓	✓	✓

**NO NEED TO RIP AND REPLACE, JUST ADD WIPS**

Each WatchGuard access point has the flexibility to operate as both an access point and a dedicated WIPS security sensor. This means that when deployed as dedicated WIPS sensors, the devices work with your existing access points (Cisco, Aruba, Ruckus, Ubiquiti, etc) and add enterprise-grade wireless security protection to your network. In this case, instead of delivering secure Wi-Fi traffic to users, we deliver unprecedented WIPS security protection that is 100% dedicated to scanning the air and protecting your business from wireless threats.

For additional details, talk to your authorized WatchGuard reseller or visit <https://www.watchguard.com/wifi>

**About WatchGuard Technologies, Inc.**

WatchGuard® Technologies, Inc. is a global leader in network security, 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](http://WatchGuard.com).

**AP325**

