WatchGuard®

AP322 OUTDOOR ACCESS POINT

IP67-rated enclosure, 3x3 MIMO, 802.11ac Wave 1 support

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

WatchGuard's AP322 brings secure, cloud-managed Wi-Fi to the outdoors. Its rugged, IP67-rated enclosure protects the wireless access point from the wind, rain, and cold weather, while six integrated omnidirectional antennas operate with three spatial streams per radio (3x3 MIMO) to deliver broad, fast, and reliable Wi-Fi coverage. The AP322 is ideal for stadiums and sports fields, schools/universities, malls, parks, hotel pool areas and open air cafes, shipping docks, warehouses, and other harsh environments or outdoor locations.

"For us to have the infrastructure in place where people can access a Wi-Fi network that's reliable, and have stable access to the Internet, that's huge. Those little things that we all do on a daily basis, that are a normal part of our lives – we can create opportunities for the people we support to interact with that, instead of missing out on so much of what's available."

~ Alan Berner, VP of Community Services, The Phoenix Residence

FLEXIBLE MANAGEMENT OPTIONS

You can manage AP322 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 AP322 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

- Support for up to 8 individual SSIDs per radio allows for maximum flexibility in network design.

- The IP67 sealed enclosure protects APs in harsh, wet outdoor environments so they can be mounted with direct exposure to the elements – no overhang or shelter required.

- AP322 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	8.26" x 8.26" x 2.6378" (210 mm x 210 mm x 67 mm)
Weight	3.22 lb. (1.46 kg)
Operating Temperature	-20°C to 55°C (-4°F to 131°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	5% to 95% non-condensing
Power Consumption	Max: 19W Min: 11W Average: 16W

Bottom View

Side View

Port	Description	Connector Type	Speed/Protocol
LAN1	Gigabit Ethernet port that enables the device to connect to the wired LAN and communicate with the WatchGuard Cloud or Server. This port is also used to power the device using the 802.3at Power over Ethernet Plus (PoE+) standard.	IP67 rated weatherproof RJ-45	10/100/1000 Mbps Gigabit Ethernet 802.3at PoE+
LAN2	Gigabit Ethernet port that can be used for wired extension of an SSID	IP67 rated weatherproof RJ-45	10/100/1000 Mbps Gigabit Ethernet
Reset	Reset to factory default settings	Push button	Hold down an power cycle the device to reset

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 with peak gain up to 7.5dBi		

IEEE 802.11a/n/ac			
Frequency Band	Scanning	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
	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~ 5.825GHz	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 0-23) with automatic rate adaptation		
Antenna	Integrated modular high efficiency PIFA omnidirectional antenna with peak gain up to 10.2dBi		

MAXIMUM TRANSMIT POWER – FOR 2.4TGHZ

Transmitter	Target Power(Bm)
802.11b	
1 ~ 2 Mbps	24
5.5 ~ 11 Mbps	24
802.11g	
6 ~ 24 Mbps	24
36 Mbps	23
48 Mbps	22
54 Mbps	22
802.11n HT20	
MCS 0,8,16	24
MCS 1,2,3,4,5,9,10,11,12,13,17,18,19,20,21	23
MCS 6,7,14,15,22,23	22
802.11n HT40	
MCS 0,1,2,3,4,5,8,9,10,11,12,13,16,17,18,19,20,21	23
MCS 6,7,14,15,22	22
MCS 23	21

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

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

For 5GHz	
Transmitter	Target Power(dBm)
802.11a	
6 ~ 24 Mbps	24
36 Mbps	23
48 Mbps	22
54 Mbps	22
802.11n HT20	
MCS 0,8,16	24
MCS 1,2,9,10,17,18	23
MCS 3,4,5,11,12,13,19,20,21	22
MCS 6,14,22	21
MCS 7,15,23	20
802.11n HT40	
MCS 0,8,16	23
MCS 1,2,9,10,17,18	22
MCS 3,4,5,6,11,12,13,14,19,20,21	21
MCS 7,15,22	20
MCS 23	19
802.11ac VHT20/VHT40	
MCS 0,1,2	23
MCS 3,4,5	22
MCS 6	21
MCS 7	20
MCS 8	18
MCS 9	17
802.11ac VHT80	
MCS 0,1,2	22
MCS 3,4,5	21
MCS 6	20
MCS 7	19
MCS 8	17
MCS 9	16

Receive Sensitivity – For 5GHz	
MCS Index	Receive Sensitivity
802.11a (legacy)	
6Mbps	-91
36Mbps	-78
48Mbps	-75
54Mbps	-73
802.11n HT20 (legacy)	
MCS 0,8	-91
MCS 1,9	-88
MCS 2,10	-85
MCS 3,11	-81
MCS 4,12	-77
MCS 5,13	-74
MCS 6,14	-72
MCS 7,15	-71
802.11n HT40	
MCS 0,8	-87
MCS 1,9	-85
MCS 2 ,10	-82
MCS 3,11	-78
MCS 4,12	-74
MCS 5,13	-70
MCS 6,14	-69
MCS 7,15	-68
802.11ac 256QAM VHT80	
MCS 0	-84
MCS 1	-82
MCS 2	-79
MCS 3	-75
MCS 4	-71
MCS 5	-67
MCS 6	-66
MCS 7	-65
MCS 8	-60
MCS 9	-58

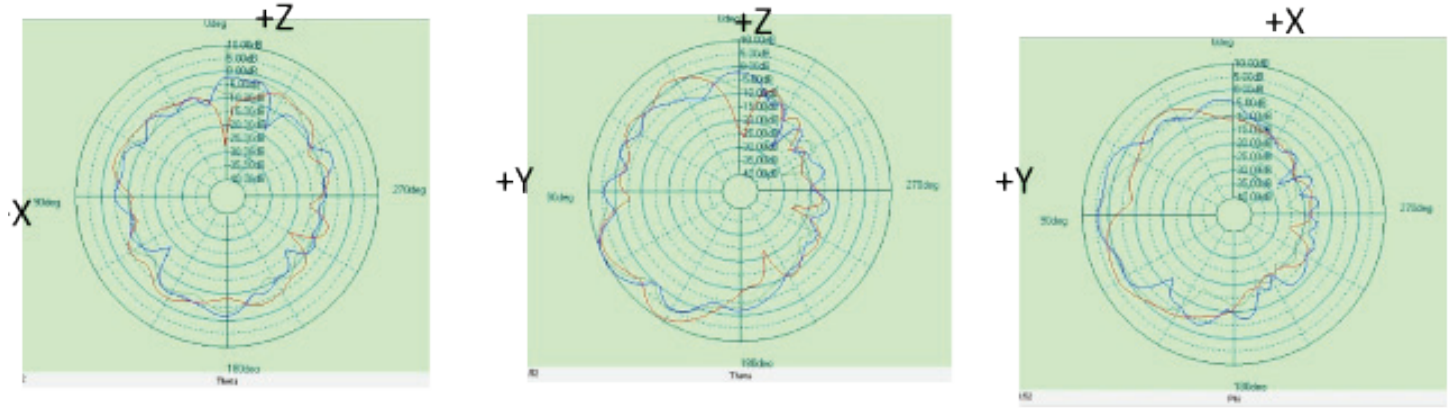| For 2.4GHz	
MCS Index	Receive Sensitivity
802.11b	
1Mbps	-94
11Mbps	-86
802.11g	
6Mbps	-90
24Mbps	-81
36Mbps	-78
48Mbps	-74
54Mbps	-73
802.11n HT20	
MCS 0,8	-90
MCS 1,9	-87
MCS 2,10	-84
MCS 3,11	-80
MCS 4,12	-77
MCS 5,13	-73
MCS 6,14	-71
MCS 7,15	-69
802.11n HT40	
MCS 0,8	-86
MCS 1,9	-84
MCS 2,10	-81
MCS 3,11	-77
MCS 4,12	-74
MCS 5,13	-70
MCS 6,14	-68
MCS 7,15	-66

INTERNAL ANTENNA RADIATION PATTERNS

5 GHz
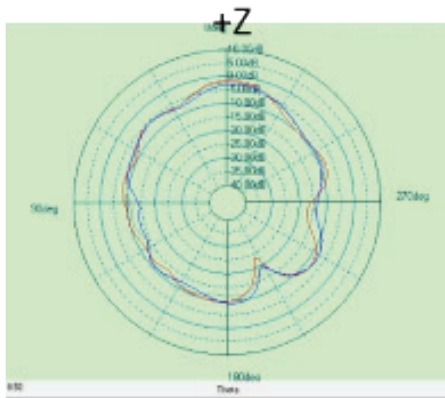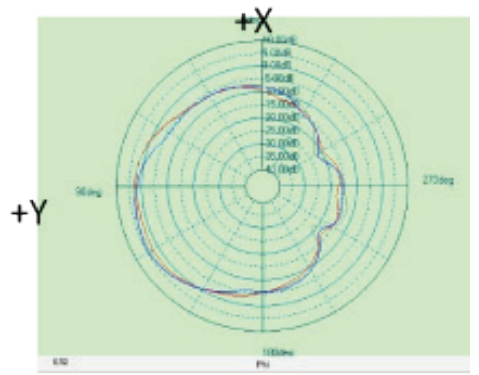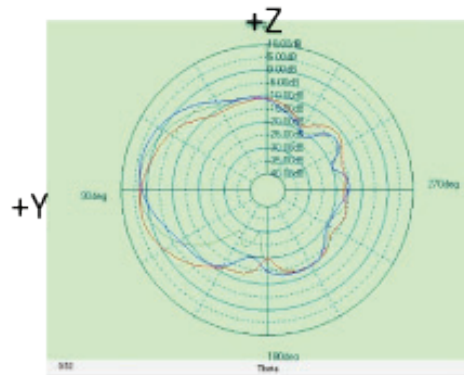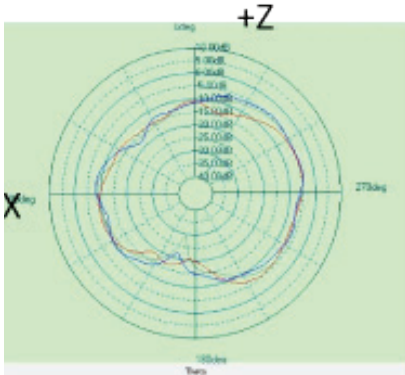
Antenna 1
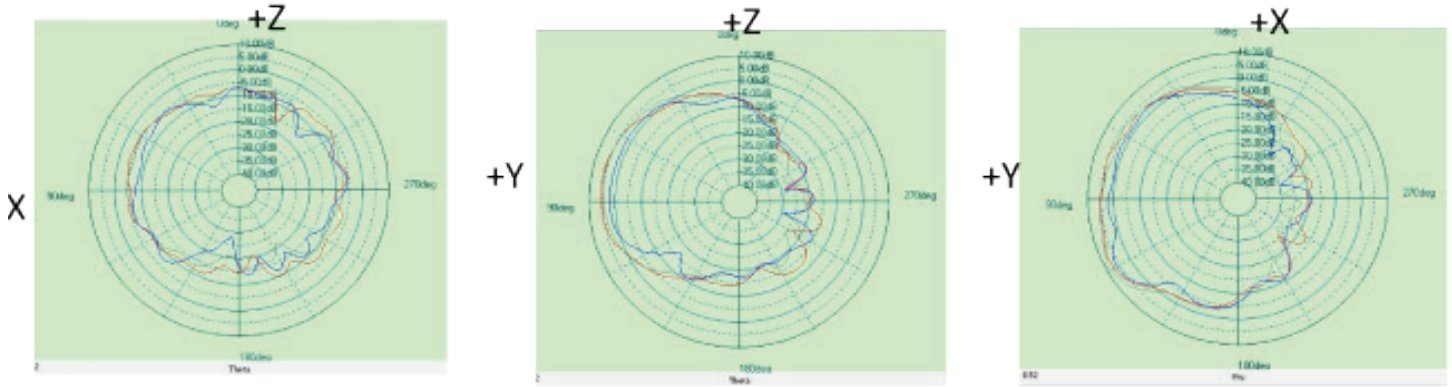
Antenna 2
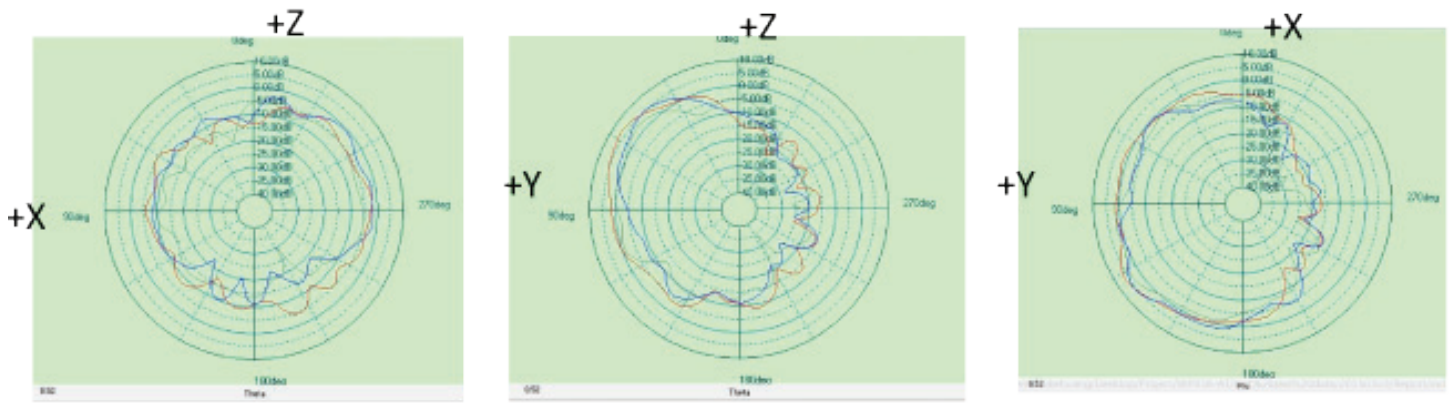
Antenna 3

2.4 GHz

Antenna 1
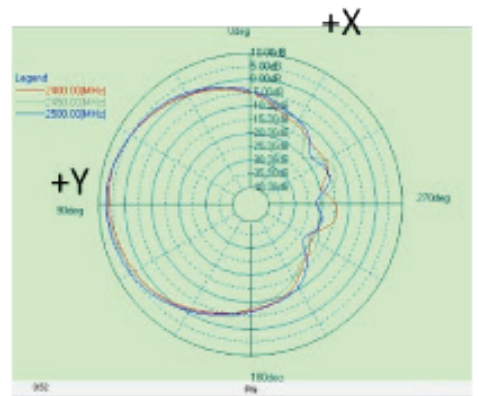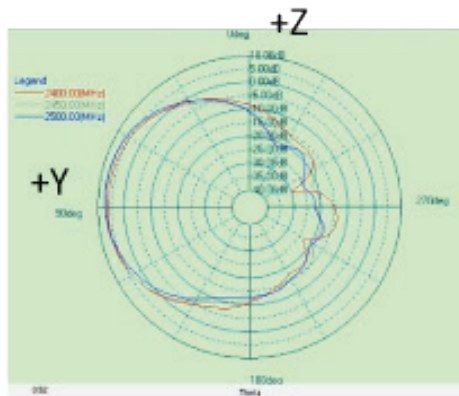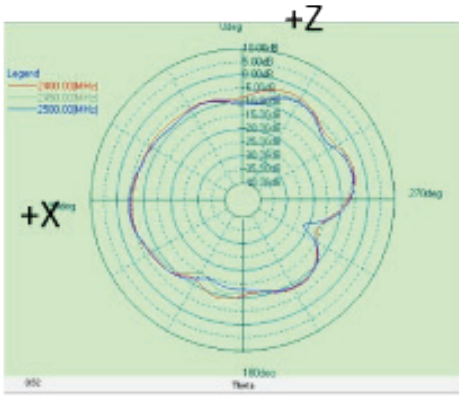
Antenna 2
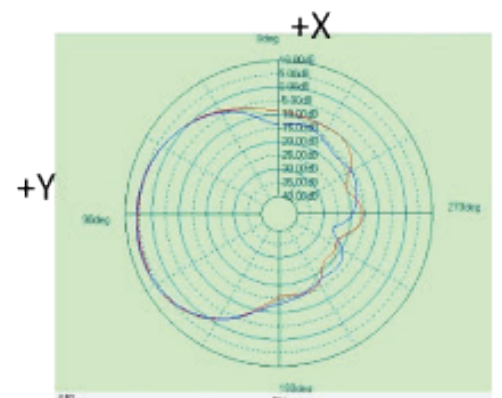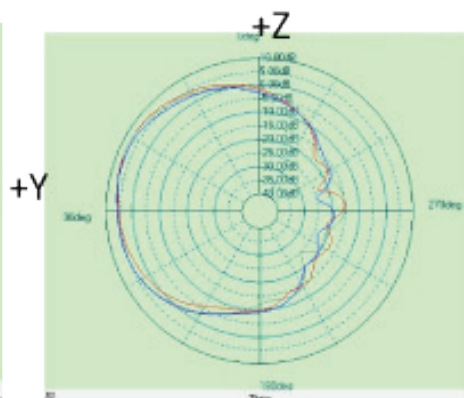
Antenna 3

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

ORDERING INFORMATION

Access Point

Part Number	Description
WGA3W723	**WatchGuard AP322 and 3-yr Total Wi-Fi** Total Wi-Fi Package includes AP with subscription to manage that AP in Wi-Fi Cloud, Standard Support, WIPS, Engage Captive Portals, Analyze Location Analytics, and Go Mobile Web App
WGA3W721	**WatchGuard AP322 and 1-yr Total Wi-Fi** Total Wi-Fi Package includes AP with subscription to manage that AP in Wi-Fi Cloud, Standard Support, WIPS, Engage Captive Portals, Analyze Location Analytics, and Go Mobile Web App
WGA3W733	**WatchGuard AP322 and 3-yr Secure Wi-Fi** Secure Wi-Fi Package includes AP with subscription to manage that AP in Wi-Fi Cloud, Standard Support, and WIPS
WGA3W731	**WatchGuard AP322 and 1-yr Secure Wi-Fi** Secure Wi-Fi Package includes AP with subscription to manage that AP in Wi-Fi Cloud, Standard Support, and WIPS
WGA3W703	**WatchGuard AP322 and 3-yr Basic Wi-Fi** Basic Wi-Fi Package includes AP with subscription to manage that AP with a Gateway Wireless Controller and Standard Support
WGA3W701	**WatchGuard AP322 and 1-yr Basic Wi-Fi** Basic Wi-Fi Package includes AP with subscription to manage that AP with a Gateway Wireless Controller 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)

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
Management Platform	Wi-Fi Cloud	Wi-Fi Cloud	Firebox Appliance*
Scalability Number of managed access points.	Unlimited	Unlimited	Limited**
Configuration and Management SSID configuration with VLAN support, band steering, smart steering, fast roaming, user bandwidth control, Wi-Fi traffic dashboard.	✓	✓	✓
Additional Wi-Fi Cloud-Based Management Radio Resource Management, Hotspot 2.0, enhanced client roaming, nested folders for configuration before deployment, integration with 3rd party WLAN controllers.	✓	✓	
Intelligent Network Visibility and Troubleshooting Pinpoint meaningful network problems and application issues by seeing when an anomaly occurs above baseline thresholds and remotely troubleshoot.	✓	✓	
Verified Comprehensive Security A patented WIPS technology defends your business from the six known Wi-Fi threat categories, enabling a Trusted Wireless Environment.	✓	✓	
GO Mobile Web App Quickly and easily set-up your WLAN network from any mobile device.	✓	✓	
Guest Engagement Tools Splash pages, social media integrations, surveys, coupons, videos, and so much more.	✓		
Location-Based Analytics Leverage metrics like footfall, dwell time, and conversion to drive business decisions and create customizable reports.	✓		
Support Hardware warranty with advance hardware replacement, customer support, and software updates	Standard	Standard	Standard

*Requires Firebox with active support contract.**20 access points recommended for each Firebox model. For the T-15 Firebox model 4 access points are recommended.

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**.

AP322

LAN2   LAN1(POE+)   Reset Button