

Key Specifications

- 2x2 MU-MIMO with two spatial streams per radio
- Third 2x2 MIMO radio for dedicated RF and WIPS scanning
- 802.11ac Wave 2 support
- Up to 400 Mbps for 2.4 GHz radio
- Up to 867 Mbps for 5 GHz radio
- Six integrated omnidirectional antennas
- 20/40/80 MHz channel width support
- Integrated Bluetooth Low Energy (BLE)
- 2x Gigabit Ethernet port
- Full Operational Capacity with 802.3at PoE+

Key Features

- 100% controller-free
- Zero-touch deployment through automatic cloud activation and configuration
- Support for up to eight distinct SSIDs per radio
- Integrated layer 2 and application firewall, per-user bandwidth controls, and QoS per SSID
- Dynamic RF optimization through smart steering, band steering and optimal channel selection
- Automated device access logging
- Non-WiFi VLAN monitoring for extended rogue access point detection
- Third party analytics integration for real-time data transfer
- Self-healing wireless mesh networking

Top Performance at the Best Price

Arista W-118 is an enterprise-grade 2x2 MU-MIMO tri-radio 802.11ac wall plate access point with dual concurrent 5 GHz and 2.4 GHz radios supporting 802.11a/n/ac Wave 2, 802.11b/g/n, two spatial streams, and data rates of up to 876 Mbps and 300 Mbps, respectively. It also contains a third 2x2 MIMO 802.11ac radio for dedicated multi-function scanning and a fourth 2.4 GHz Bluetooth Low Energy (BLE) or ZigBee low-power radio.

Why Choose the W-118?

The W-118 provides best value amongst high-performing, modern wall plate access points designed for cost conscious organizations. Built using the latest 802.11ac Wave 2 chipsets, the W-118 is perfect for medium density environments looking for the high performance and advanced features of current access points without the high cost. Common deployment scenarios include small and medium schools, distributed remote offices, small meeting rooms, and enterprise campuses.

The W-118 provides access to advanced access point features like role-based firewalls and application visibility without the high cost typically associated with Wave 2 devices. The W-118 is also a perfect fit for organizations in need of future-ready dedicated security sensors

iBeacon Bluetooth Low Energy Support

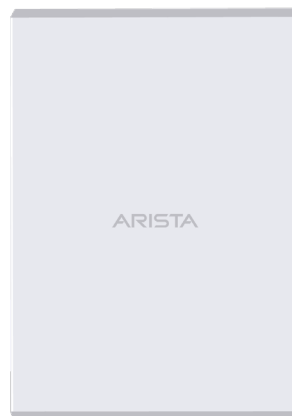
The Arista W-118 supports the iBeacon Bluetooth Low Energy (BLE) standard. BLE is used for proximity based services on mobile devices via an application ecosystem. W-118 can be configured to advertise a unique identifier through iBeacons at a periodic interval.

Arista Cloud Managed WiFi

The W-118 is managed by the Arista cloud and leverages a purpose-built cloud architecture to produce enterprise-grade wireless networks for every application required, ensuring high reliability through an approach that is automated, scalable, secure and cost effective.

What Really Matters

The future of WiFi requires intelligent, self-reliant access points that support high-performing, highly reliable networks without the need for antiquated controllers. This approach removes the complexity, instability and high costs associated with enterprise WiFi today.



Arista W-118

Access

The W-118 creates WiFi networks that require less time and resources to deploy and maintain compared to traditional devices, resulting in significant cost savings.

- Arista access points take less than two minutes to activate and configure after connecting to the cloud
- Support for up to eight individual SSID's per radio allows for maximum flexibility in network design
- Network controls like NAT, Firewall and QoS occur at the access point level, ensuring faster and more reliable networks
- Persistent scanning by dedicated 2x2 third radio of all 802.11 channels increases insight and data about the surrounding environment to assist in RF optimization and client handling
- Smart steering addresses sticky client issues by automatically pushing clients with low speeds to a closer access point
- Band steering manages channel occupancy, pushing clients to the 5 GHz channel for optimal throughput
- Access points continue to broadcast and support wireless networks even if their connection with the cloud is interrupted

Security

The W-118 offers complete visibility and control of the wireless airspace that keeps the integrity of the network in check and actively protects users without manual intervention.

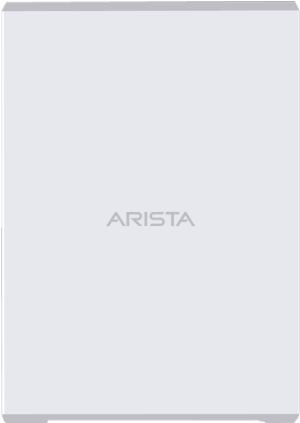
- Every Arista access point is equipped with the industry's only fully integrated wireless intrusion prevention capabilities
- Runs complete spectrum scans while simultaneously serving wireless clients with dedicated third radio
- Arista's patented Marker Packets™ are used to accurately detect access points on any network with the fewest false positives in the industry
- Third radio used as a dedicated security sensor for 24x7x365 scanning and automated over-the-air (OTA) prevention
- VLAN monitoring enables a virtual connection to non-WiFi networks for complete network rogue detection and prevention
- Automatic prevention combines over-the-wire and over-the-air techniques to keep unauthorized clients off the network and authorized clients on it
- Access points continue to scan for wireless threats and enforce security policy even if their connection with the cloud is interrupted

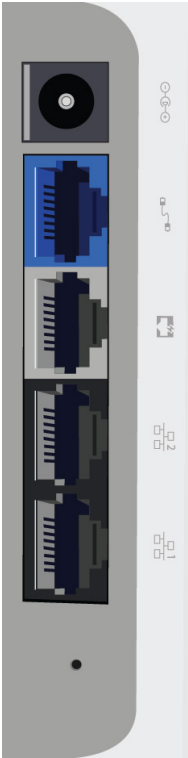
Engagement

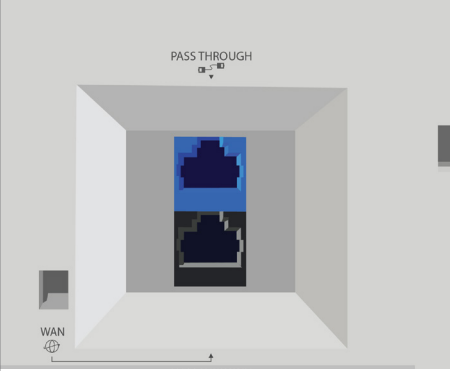
The W-118 collects massive amounts of data and supports immersive guest network experiences that develop and reinforce the relationship between them and the brand.

- Persistent scanning of all 802.11 channels results in a comprehensive list of active wireless clients across the enterprise
- Choice statistics like location, duration, distance from access point and time of day are stored locally for every active wireless client
- Statistics such as session duration, total data transfer up and down, data rate, smart device type and top-level domain are stored locally for every active connection
- Real-time notifications sent to third party systems that alert to the presence of enrolled devices
- Enables proximity marketing programs that trigger when certain devices are present
- Triggers automatic messaging via MMS, in-browser notifications and more

Physical Specifications

	Property	Specification	
	Physical Dimensions	220mm X 220mm X 57mm	
	Weight	1.3kg (2.86 lb)	
	Operating Temperature	0°C – 40°C (32°F – 104°F)	
	Storage Temperature	-25°C – 75°C (-13°F – 167°F)	
	Humidity	0%-95% non-condensing	
	Max power consumption	12.95W (802.3at)	12.95 (802.3af)
	Chipset	Qualcomm QCA4019 SOC	
	Processor RAM	Qualcomm IPQ4019 717MHz quad core ARM processor with 512 MB RAM and 32 MB Flash	

	Port	Description	Connector Type	Speed/Protocol
	DC IN	Enables connecting to and powering the device using 12 V DC power with 2 ampere.	5.5mm overall diameter/2.1mm center pin/hole	
	Pass-through port	The pass-through port is used to plug a device into another wired port that is available on the wall where the AP is installed. The pass-through port at the rear of the device and pass-through port on the bottom of the device are internally connected.	RJ-45	--
	Ethernet (LAN3/PSE)	Gigabit Ethernet port that can be used for wired extension for an SSID. This port also provides the power for the device using the 802.3af standard	RJ-45	10/100/1000 Mbps Gigabit Ethernet
	Ethernet (LAN2/LAN1)	Gigabit Ethernet port that can be used for wired extension for an SSID.	RJ-45	10/100/1000 Mbps Gigabit Ethernet
	Reset	Reset to factory default settings	Pin hole push button	Hold down and power cycle the device to reset

	Port	Description	Connector Type	Speed/Protocol
	Passthrough	This is a wired port that facilitates extension of the wired network after the AP is mounted on the wall. Another device can be plugged in to the pass-through port on the bottom of the W-118 device. The traffic on the pass-through port does not interfere with the AP traffic. No policies can be applied on the pass-through port traffic.	RJ-45	-
	WAN	Enables the connection to wired LAN through a switch or hub. The device can then communicate with the server. This port also provides the power for the device using the 802.3af standard	RJ-45	10/100/1000 Mbps Ethernet Power over Ethernet

Operational Specifications

Input Power	12V DC/1.5A (3.5mm overall diameter/1.35mm center pin/hole)/802.3at (PoE+)/ 802.3af (PoE)
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. 1 BLE Radio: A fourth Bluetooth Low Energy radio for proximity based services on mobile devices via an application ecosystem.
Max Clients Supported	512 clients per radio (dependent upon use cases)
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
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, 4.9-5.0 GHz, 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.

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 (peak gain 5.0 dBi)		

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 (peak gain 5.0 dBi)		

Maximum Aggregate Transmit Power
For 2.4 GHz

MCS Index	Transmit Power(dBm)
802.11b	
1 Mbps - 11 Mbps	22.4
802.11g	
6 Mbps - 48 Mbps	24.92
54 Mbps	
802.11n HT20	
MCS 0,1,2,3,4,5	24.26
802.11n HT40	
MCS 0,1,2,3,4,5	23.87

For 5 GHz

MCS Index	Transmit Power(dBm)
802.11a	
6 Mbps - 48 Mbps	26.36
802.11n HT20	
MCS 0,1,2,3,4,5	26.36
802.11n HT40	
MCS 0,1,2,3,4,5	26.42
802.11ac VHT80	
MCS 0,1,2,3,4,5,6,7	25.93

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 2.4 GHz

MCS Index	Receive Sensitivity (dBm)
802.11g	
6 Mbps	-92
24 Mbps	-
36 Mbps	-
48 Mbps	-
54 Mbps	-75
802.11n HT20	
MCS 0,8	-92
MCS 1,9	
MCS 2,10	
MCS 3,11	
MCS 4,12	
MCS 5,13	
MCS 6,14	
MCS 7,15	-73
802.11n HT40	
MCS 0,8	-89
MCS 1,9	
MCS 2,10	
MCS 3,11	
MCS 4,12	
MCS 5,13	
MCS 6,14	
MCS 7,15	-71.5

For 5 GHz

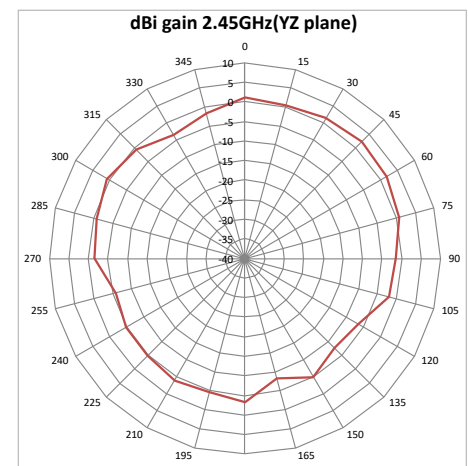
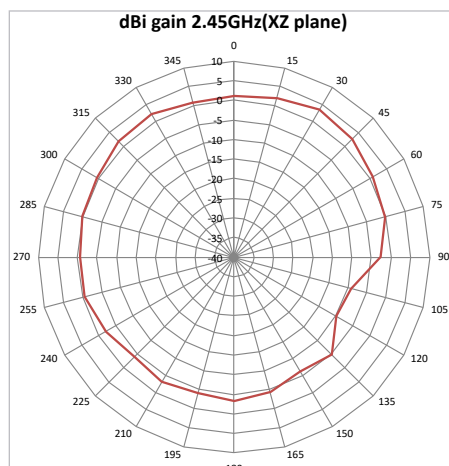
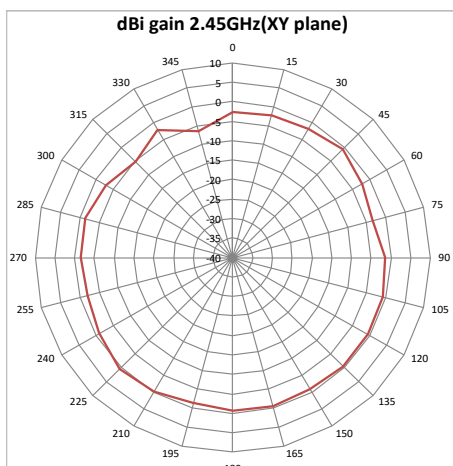
MCS Index	Receive Sensitivity (dBm)
802.11a	
6 Mbps	-90
24 Mbps	
36 Mbps	
48 Mbps	
54 Mbps	-74.5
802.11n HT20	
MCS 0,8	-90
MCS 1,9	
MCS 2,10	
MCS 3,11	
MCS 4,12	
MCS 5,13	
MCS 6,14	
MCS 7,15	-73
802.11n HT40	
MCS 0,8	-88.5
MCS 1,9	
MCS 2,10	
MCS 3,11	
MCS 4,12	
MCS 5,13	
MCS 6,14	
MCS 7,15	-70

For 5 GHz

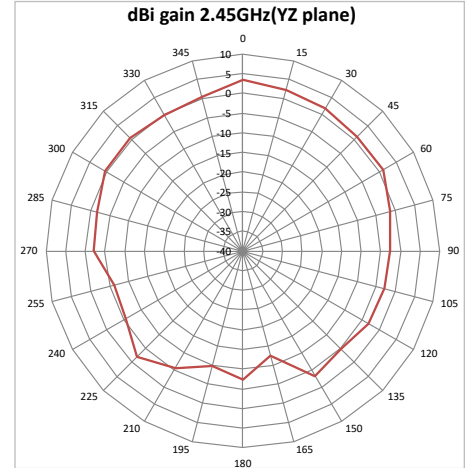
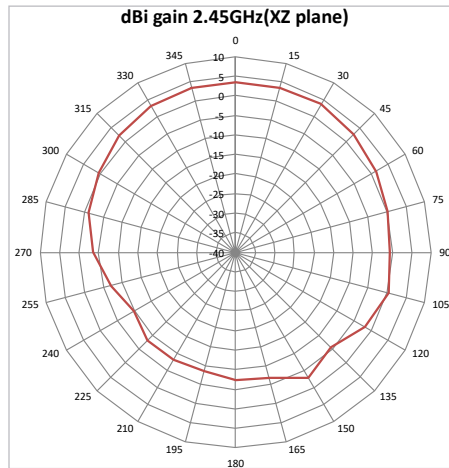
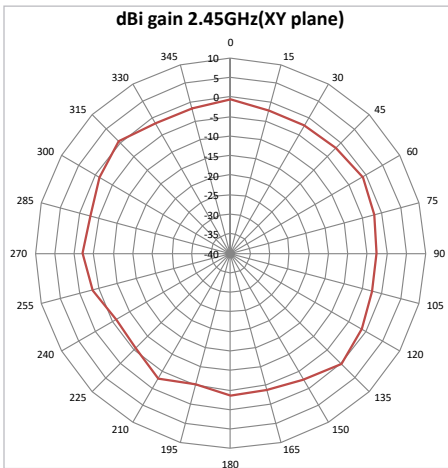
MCS Index	Receive Sensitivity (dBm)
802.11n VHT20	
MCS 0	-90
MCS 1	
MCS 2	
MCS 3	
MCS 4	
MCS 5	
MCS 6	
MCS 7	
MCS 8	-69
802.11n VHT40	
MCS 9	-65
802.11n VHT80	
MCS 0	-85.5
MCS 1	
MCS 2	
MCS 3	
MCS 4	
MCS 5	
MCS 6	
MCS 7	
MCS 8	
MCS 9	-61

Internal Antenna Radiation Patterns

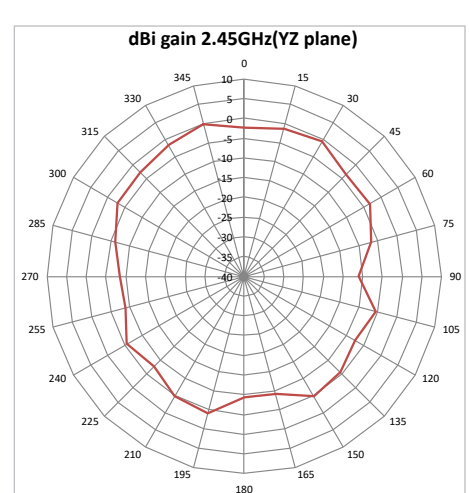
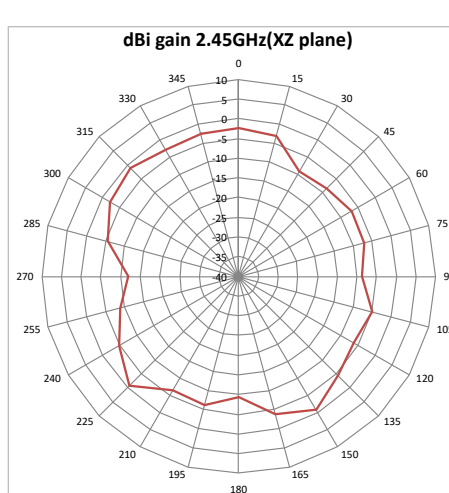
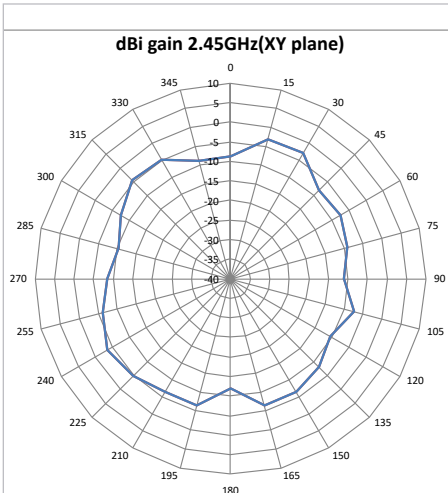
2 GHz Antenna 1



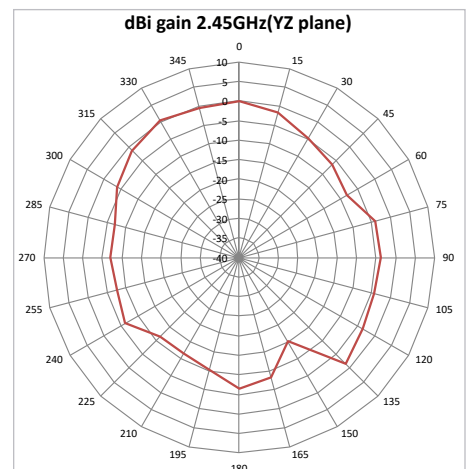
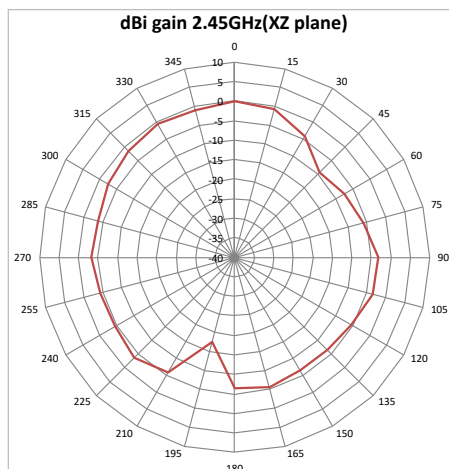
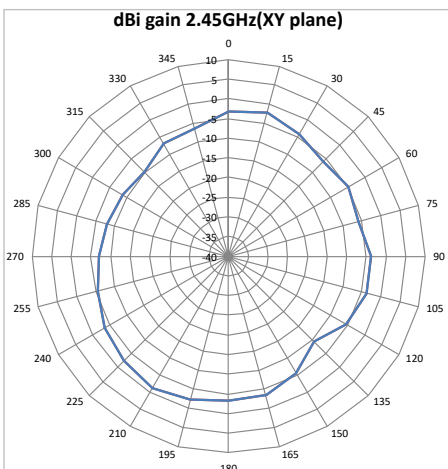
2 GHz Antenna 2



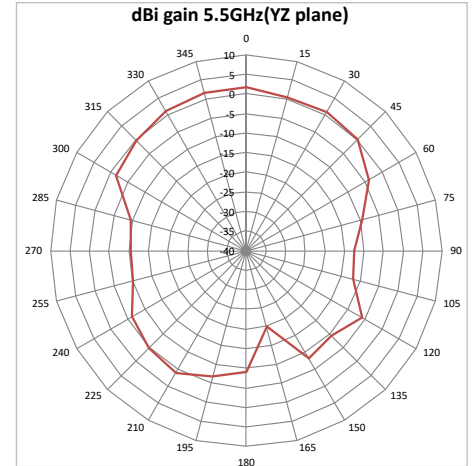
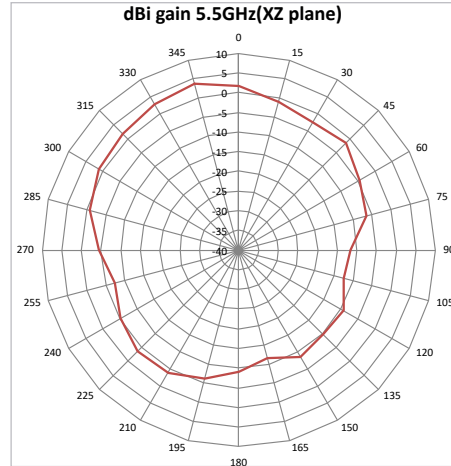
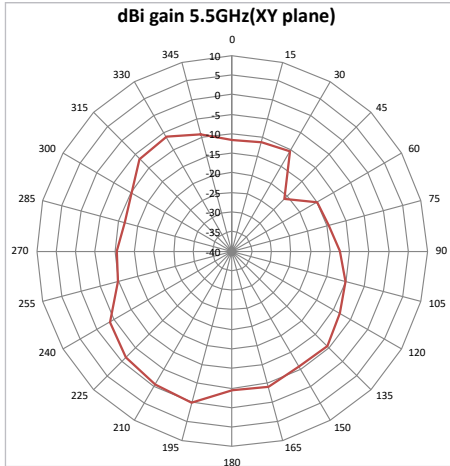
2 GHz Antenna 3



2 GHz Antenna 4



5 GHz Antenna 4



Regulatory Specifications RF and Electromagnetic

Country	Certification
USA	FCC Part 15.247, 15.407
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
OEM-AP-W118	W-118 2x2:2 dual radio 802.11ac wave-2 access point with internal antennas and "X" Year enterprise cloud subscription and support

Power Options

Part Number	Description
PI-PLUS	One port 802.3at PoE+ injector for C120, C130, W68, C110 PS-W-118-UN W-118 AC power supply

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