

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
- Integrated omnidirectional antennas
- 20/40/80 MHz channel width support
- Integrated BLE
- 2x Gigabit Ethernet port
- Full Operational Capacity with 802.3at PoE+

Key Features

- Distributed Data Plane architecture
- Zero-touch deployment through automatic cloud activation and configuration
- Cloud or on premises management plane options
- Operating modes for dedicated access, dedicated security or dual-mode
- Support for up to 8 distinct SSIDs per radio
- Integrated firewall, traffic shaping, QoS and BYOD controls per SSID
- Dynamic RF optimization through smart steering, band steering and optimal channel selection
- Application visibility through layer 7 deep packet inspection
- Automated device access logging
- Patented Marker Packettm technology for rogue AP detection and classification
- Wired VLAN monitoring for "No-WiFi" zone enforcement
- Third party analytics integration with 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) 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

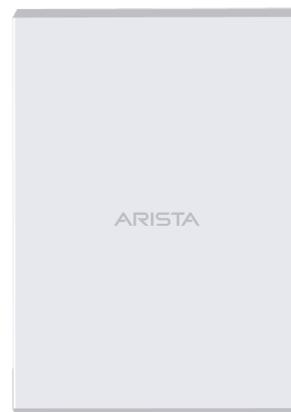
The Arista W-118 supports the iBeacon Bluetooth Low Energy (BLE) standard. BLE is used for proximity based services on mobile devices via an application ecosystem. W-118 can be configured to advertise a unique identifier through iBeacons at a periodic interval.

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.

- Plug and play provisioning using either Cloud or On-premise deployments - Arista Access Points take less than two minutes to activate and configure after connecting to the cloud
- Support for up to eight individual SSIDs per radio providing maximum flexibility in network design
- Network controls like NAT, Firewall and QoS implemented at the Access Point, ensuring faster and more reliable networks
- Continuous scanning of all 2.4 GHz and 5 GHz channels by a dedicated 2x2 third radio provides a dynamic, 360 degree view of the RF environment to assist in RF optimization and client handling
- Network availability and performance assurance using the third radio as a client to conduct on-demand and scheduled connectivity and performance tests
- Smart steering addresses sticky client issues by automatically pushing clients with low data rates to a better access point
- Band steering manages channel occupancy, pushing clients to the 5 GHz channel for optimal throughput
- Smart load balancing distributes load evenly across neighbouring APs to optimize the use of network resources
- Arista Wi-Fi's distributed data plane architecture continues to serve users and secure the network even if connection with the management plane is interrupted
- Interference avoidance from LTE/3G small/macro cells in commonly used TDD/FDD frequency bands

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.

- W-118 is equipped with industry leading fully integrated wireless intrusion prevention capabilities
- Multifunction third radio provides uninterrupted spectrum scanning or client emulation for always on security coverage alongside dedicated 2.4G/5G client radios.
- Arista's patented Marker Packets™ help accurately detect rogue access points on any network while minimizing false positives
- Third radio used as a dedicated security sensor for 24x7x365 scanning and automated over-the-air (OTA) prevention
- Deterministic rogue AP detection and prevention by monitoring all WiFi and non-WiFi VLANs.
- Over-the-air and on-the-wire prevention techniques assure automatic and reliable threat prevention to keep unauthorized clients and rogue APs off the network without impacting authorized connections.
- Access Points autonomously scan for wireless threats and enforce security policy even if disconnected from the cloud management plane
- VLAN monitoring enables a virtual connection to non-WiFi networks for complete network rogue detection and prevention

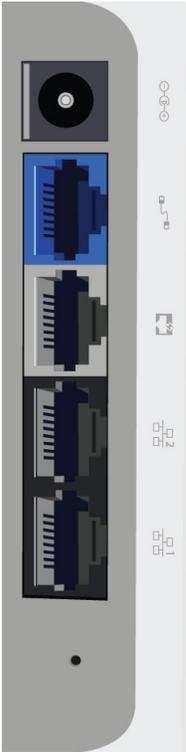
Analytics

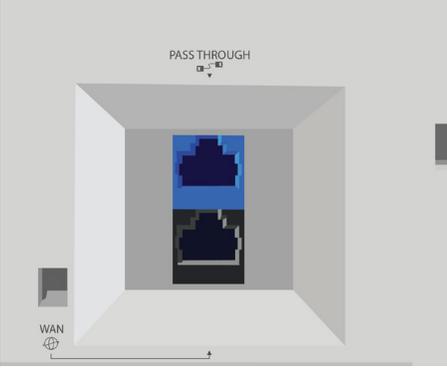
The W-118 collects massive amounts of data and supports immersive guest network experiences that develop and reinforce the relationship between them and the brand.

- Reports of customer footfall, demographic, loyalty and other analytics provide insightful and actionable information.
- Supports proximity marketing programs that trigger when certain devices are present, which includes automatic messaging via MMS in-browser notifications and real time notifications sent to 3rd party systems that alert to the presence of enrolled devices.

Physical Specifications

|  | Property | Specification |
|---|-----------------------|---|
| | Physical Dimensions | 186.4mm X 123.9mm X 25.5mm / 7.3" X 4.9" X 1" |
| | Weight | .455kg (1 lb) |
| | Operating Temperature | 0°C – 40°C (32°F – 104°F) |
| | Storage Temperature | -25°C – 75°C (-13°F – 167°F) |
| | MTBF | 535,205 hr @ 40°C 1,081,559 hr @ 25°C |
| | Humidity | 0%-95% non-condensing |
| | Power consumption | 11.8W (max) / 5.1W (min) / 8.3W (avg) |
| | 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 |
|--|-----------------------------------|---|---|-----------------------------------|
| | Power | 12V 2A | 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 2A |
| 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 |
| 802.11g | |
| 6 Mbps - 48 Mbps | 25 |
| 54 Mbps | |
| 802.11n HT20 | |
| MCS 0,1,2,3,4,5 | 24 |
| 802.11n HT40 | |
| MCS 0,1,2,3,4,5 | 24 |

For 5 GHz

| MCS Index | Transmit Power(dBm) |
|-----------------------|---------------------|
| 802.11a | |
| 6 Mbps - 48 Mbps | 26. |
| 802.11n HT20 | |
| MCS 0,1,2,3,4,5 | 26 |
| 802.11n HT40 | |
| MCS 0,1,2,3,4,5 | 26 |
| 802.11ac VHT80 | |
| MCS 0,1,2,3,4,5,6,7 | 26 |

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

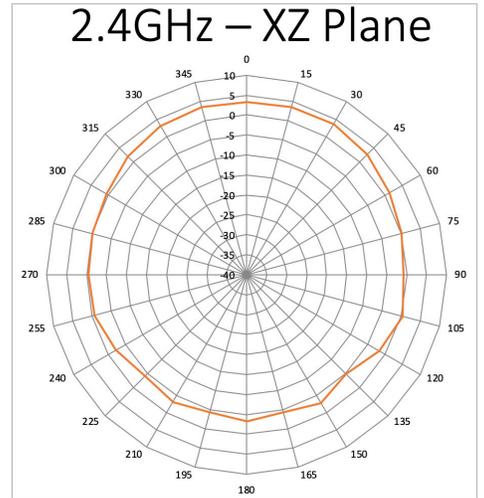
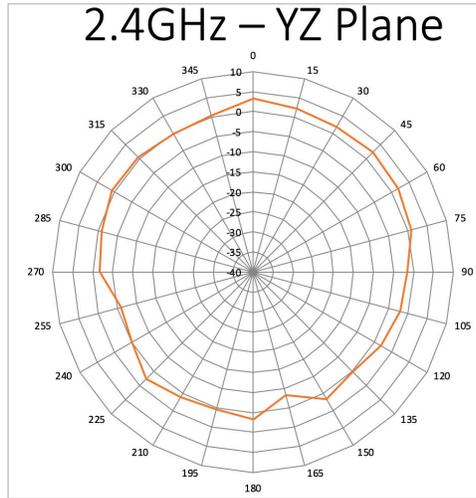
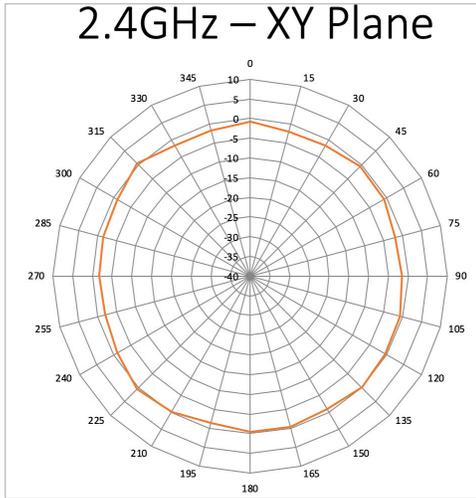
| MCS Index | Receive Sensitivity (dBm) |
|---------------------|---------------------------|
| 802.11a | |
| 6 Mbps | -90 |
| 24 Mbps | |
| 36 Mbps | |
| 48 Mbps | |
| 54 Mbps | -74.5 |
| 802.11n HT20 | |
| MCS 0, 8 | -90 |
| MCS 1,9 | |
| MCS 2,10 | |
| MCS 3,11 | |
| MCS 4,12 | |
| MCS 5,13 | |
|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

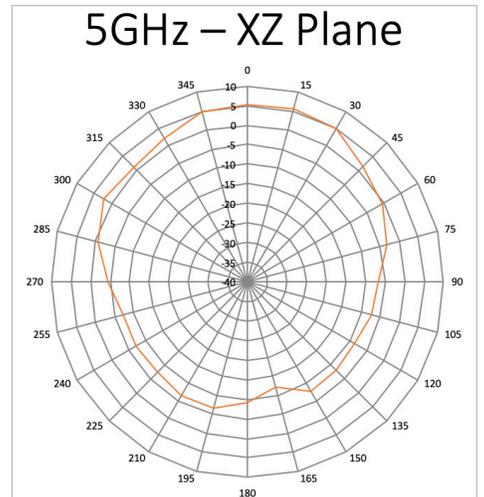
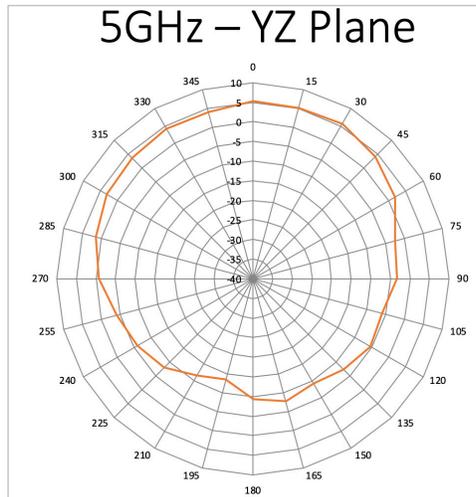
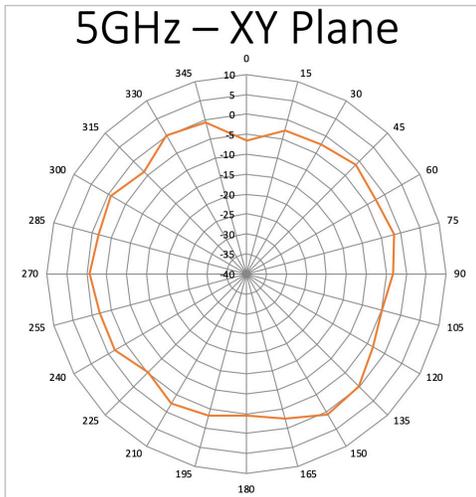
Internal Antenna Radiation Patterns

2.4 GHz



Internal Antenna Radiation Patterns

5 GHz



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. |

*For complete country certification records, please visit the site: <https://www.arista.com/en/support/product-certificate>

Safety

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

Ordering Information: Access Point

| Part Number | Description |
|---------------|--|
| AP-W118-SS-5Y | W-118 2x2:2 tri radio 802.11ac Wave-2 wall plate access point with internal antennas and 5 year Cognitive Cloud SW Subscription |
| AP-W118-SS-3Y | W-118 2x2:2 tri radio 802.11ac Wave-2 wall plate access point with internal antennas and 3 year Cognitive Cloud SW Subscription |
| AP-W118 | W-118 2x2:2 tri radio 802.11ac Wave-2 wall plate access point with internal antennas |
| AP-W118-RW | W-118-RW 2x2:2 tri radio 802.11ac Wave-2 wall plate access point with internal antennas (bundled with Stand, Power supply, Ethernet cable) |

Power

| Part Number | Description |
|----------------|--|
| PWR-AP-W4 | Universal AC power supply for all APs except for C-110 |
| PWR-AP-PLUS-NA | One port 802.3at PoE+ injector for use with all Access Point models. Includes USA power cord. Not for outdoor use." |
| PWR-AP-W2 | Universal AC power supply for C-120, C-130, W-118 and C-100 |
| PWR-AP-W3 | Non-discountable purchase. Universal AC power supply for W-118, C-120, C-130 and C-100, 12VDC, 2A, Center +, DC Plug 5.5mm*2.1mm*L9.5mm, US UK Euro AU Plugs |

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