![Avaya logo]

Engage The Power of We™

The WLAN Outdoor Access Point 9122 is a high performance 802.11n access point, designed for harsh environments. It is part of the next generation Avaya wireless portfolio that delivers wired-like performance and predictability. It supports application QoS enforcement within the AP to provide a high quality user experience and ensure that business critical applications are not impacted by personal applications. Additionally, Avaya unified access offers automated provisioning of APs and end clients/users while extending Avaya's Fabric intelligence all the way to the APs.

Avaya WLAN Outdoor Access Point 9122

(Regulatory Model WAO9120)

Overview

The Avaya WLAN Outdoor Access Point 9122 (WAO 9122) is a high-performance 802.11n access point designed for harsh environments. The hardened case protects the electronics from rain, heat, cold, direct sun and wind, allowing customers to extend wireless coverage outdoors.

It includes two software programmable (2.4GHz and 5GHz) radios with two lightning protected RP-TNC style connectors each, integrated wireless controller, application-level intelligence, automated provisioning, and cloud management (optional, future) contained in a hardened case. The WAO 9122 is designed to meet requirements for extending wireless coverage outdoors or in other harsh environments such as playgrounds, campus quads, stadium stands and warehouse freezers.

At A Glance

- Dual radio 300Mbps (2x2 MIMO) 802.11n AP

- Two software programmable radios enabling dual 5GHz operation

- External RP-TNC antenna connectors— two per radio

- Supports up to 240 users

- Integrated controller

- -40˚C to +55˚C rated, weather and dust sealed

Key Benefits

Application Control

Firewall, apply QoS, and manage 1300+ application types under 15 categories using Layer 7 Deep Packet Inspection (DPI) and other contextual application detection techniques.

2.4GHz Optimization

Extended radio power control range enables reduced 2.4GHz cell size coverage to optimize channel reuse in dense scenarios and improve user capacity. Honeypot Mode helps increase available wireless device density through management of spurious association traffic.

5GHz Optimization

With two software programmable radios ran can be configured to run at either 2.4GHz or 5GHz, the WLAN 9122 Outdoor AP eases the transition from 2.4GHz to 5GHz centric networks.

Bonjour Director Support

Extend Apple Bonjour protocols across Layer 3 boundaries for simple setup and configuration of commonly used shared Apple services such as Airplay and Airprint.

Bring Your Own Device

Integration with Avaya Identity Engines allows guests and employees alike to use personal wireless devices while the WLAN AO 9122 enforces appropriate access policies.

Fully Ruggedized

The WLAN AO 9122 meets the requirement of the harshest environments. It is completely dust sealed and meets the requirements for IP65. The product has been tested to operate in temperatures as low as -40˚C and as high as +55˚C.

Automated Provisioning

Avaya's holistic Unified Access solution provides automated identification and provisioning of APs by extending its innovative Fabric technology to the wireless edge.

Configuration Specifications

	WLAN AO 9122
Chassis Size	Rectangular - 9.875" x 10.125"
Total Radios	2
Radio Type	Two 300Mbps Software Programmable (2.4GHz or 5GHz)
Maximum Wi-Fi Bandwidth	600Mbps
Number of External Antenna Connectors	4
Max Wi-Fi Backhaul	300Mbps
Gigabit Ethernet Uplink Ports	1
Maximum Associated Users	240 (120 per radio)
Radio Interface	PCI
Maximum Power Consumption (absolute max when running both radios at continuous transmit)	12.5W

Technical Specifications

FEATURE	SPECIFICATIONS	
CPU	300MHz Cavium CN5020 Processor with 2 MIPS-64 Cores	
Installed Memory	512MB	
RF Management	In-band per radio Spectrum Analysis Dynamic channel configuration Dynamic cell size configuration	
	Wired and wireless packet captures (including 802.11 headers)	
	Radio assurance for radio self test and healing	
	RF monitor	
	2.4 & 5.0GHz Honeypot Control – Increase available 2.4 and 5GHz wireless device density through management of spurious	
	2.4 & 5.0GHz association traffic	
	Ultra Low Power Mode – Maximize wireless channel re-use and increase wireless device density through tight power controls	
Wireless Protocols	IEEE 802.11a, 802.11b, 802.11d, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n	
Wired Protocols	IEEE 802.3 10-BASE-T, IEEE 802.3u 100BASE-TX, 1000BASE-T, IEEE 802.3ab 1000BASE-T IEEE 802.1Q – VLAN Tagging	
	IEEE 802.1D – Spanning Tree	
	IEEE 802.1p – Layer 2 Traffic Prioritization	
	IPv6 Control – Increase wireless device density through control of unnecessary IPv6 traffic on IPv4-only networks	
RFC Support	RFC 768 UDP RFC 791 IP	RFC 826 ARP
	RFC 2460 IPV6 (Bridging only) RFC 792 ICMP	RFC 1122 Requirements for internet hosts –
	RFC 793 TCP	communication layers
		RFC 1542 BOOTP RFC 2131 DHCP
Security	WPA	RFC 3280 Internet X.509 PKI certificate and CRL profile
	IEEE 802.11i WPA2, RSN	
	RFC 1321 MD5 Message-digest algorithm	RFC 4347 Datagram transport layer security
	RFC 2246 TLS protocol version 1.0	RFC 4346 TLS protocol version 1.1
Encryption Types	Open, WEP, TKIP-MIC: RC4 40, 104 and 128-bit SSL v3.0 and TLS v1.0: RC4 128-bit and RDA 1024 and 2048-bit	

WLAN 9122 Outdoor Access Point

FEATURE	SPECIFICATIONS	
Authentication	802.1X Extensible Authentication Protocol RFC 2548 Microsoft vendor-specific RADIUS attributes RFC 2716 PPP EAP-TLS RFC 2865 RADIUS Authentication RFC 2866 RADIUS Accounting RFC 2867 Tunnel Accounting RFC 2869 RADIUS Extensions RFC 3576 Dynamic Authorizations extensions to RADIUS RFC 3579 RADIUS Support for EAP RFC 3748 EAP-PEAP RFC 5216 EAP-TLS	RFC 5281 EAP-TTLS RFC 2284 EAP-GTC RFC 4186 EAP-SIM RFC 4187 EAP-AKA RFC 3748 LEAP Pass through RFC 3748 Extensible Authentication Protocol Web Page Authentication • WPR, Landing Page, Redirect • Support for Internal WPR, Landing Page and Authentication • Support for External WPR, Landing Page and Authentication

Regulatory Compliance	CE Mark
	
	Safety:
	
	  UL 60950-1:2003
	
	  EN 60950:2000
	
	  EMI and susceptibility (Class A)
		U.S.: FCC Part 15.107 and 15.109
		
		Canada: ICES-003
		
		Europe: EN 55022, EN 55024
		
		EN 301 893 V1.6.1

Physical Specifications	Dimensions (WxDxH): 2.75" x 10.125" x 9.875"	Weight: 3.0 lbs
Environmental Specifications	Operating Temperature: -40º to +55ºC IP65 rating	
Channel Support 2.4GHz (Exact channels available will be based on country code selected)	1 2 3 4 5 6 7 8 9 10 11 12 13 14	
Channel Support 5GHz (Exact channels available will be based on country code selected	UNI I DFS channels* 52 56 60 64 UNI II DFS channels* 100 104 108 112 116 120** 124** 128** 132 136 140	UNI III Non-DFS channels 149 153 157 161 165 * Subject to Certification ** Not for use in the USA
Management Interfaces	Command Line Interface (CLI), Web Interface (HTTP and HTTPS)	Avaya WLAN Orchestration System (WOS)
Management Protocols and Standards	SNMP v1 SNMPv2c as per RFCs 1901, 2580 SNMPv3 as per RFC 3410-3415 RFC 854 Telnet RFC 1155 Management Information for TCP/IP Based Internets RFC 1156 MIB RFC 1157 SNMP RFC 1212 Concise MIB Definitions RFC 1213 SNMP MIB II RFC 1215 A Convention for Defining Traps for use with the SNMP RFC 1350 TFTP RFC 1643 Ethernet MIB RFC 2030 Simple Network Time Protocol SNTP RFC 2578 Structure of Management Information Version 2 (SMIv2) RFC 2579 Textual Conventions for SMIv2 RFC 2616 HTTP 1.1 RFC 2665 Definitions of Managed Objects for the Ethernet Like Interface Types	RFC 2674 Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering and Virtual LAN Extensions RFC 2819 Remote Network Monitoring Management Information Base RFC 2863 The Interface Group MIB RFC 3164 BSD Syslog Protocol RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3) RFC 3416 Version 2 of the Protocol Operations for the Simple Network Management Protocol (SNMP) RFC 3417 Transport Mappings for the Simple Network Management Protocol (SNMP) RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP) RFC 3584 Coexistence between Version 1, Version 2, and Version 3 of the Internet-standard Network Management Framework RFC 3636 Definitions of Managed Objects for IEEE Private MIBs Integration with Splunk for accurate search and analysis of intra-organizational IT events Netflow Export v9 and IPFIX compatibility allows for IP traffic statistics collection

WLAN AO 9122 Receive Sensitivity

802.11b		802.11g		802.11a		802.11n HT20 (20MHz)			802.11n HT40 (40MHz)		
Data Rate (Mbps)	Rx Sensitivity (dBm)	Data Rate (Mbps)	Rx Sensitivity (dBm)	Data Rate (Mbps)	Rx Sensitivity (dBm)	MCS Index	Rx Sensitivity (dBm)		MCS Index	Rx Sensitivity (dBm)	
							2.4GHz	5GHz		2.4GHz	5GHz
1	-94	6	-95	6	-92	0	-95	-93	0	-93	-92
2.2	-92	9	-95	9	-92	1	-94	-90	1	-92	-91
5.5	-91	12	-95	12	-92	2	-92	-88	2	-90	-88
11	-91	18	-93	18	-86	3	-88	-84	3	-87	-85
		24	-90	24	-85	4	-86	-81	4	-84	-79
		36	-86	36	-82	5	-82	-77	5	-80	-75
		48	-83	48	-78	6	-80	-75	6	-78	-73
		54	-80	54	-77	7	-79	-73	7	-77	-72
						8	-95	-90	8	-92	-88
						9	-92	-87	9	-89	-85
						10	-89	-84	10	-87	-83
						11	-87	-82	11	-84	-80
						12	-83	-78	12	-81	-77
						13	-79	-74	13	-77	-72
						14	-78	-72	14	-75	-71
						15	-76	-71	15	-74	-70

About Avaya

Avaya is a leading, global provider of customer and team engagement solutions and services available in a variety of flexible on-premise and cloud deployment options. Avaya's fabric-based networking solutions help simplify and accelerate the deployment of business critical applications and services. For more information, please visit **www.avaya.com**.

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