ARUBA networks

PRODUCT LINE MATRIX

802.11a/b/g/n Access Points

ARUBA INDOOR 802.11a/b/g/n ACCESS POINT PRODUCT LINE MATRIX

Model		AP-68 & AP-68P	AP-92 & AP-93	AP-105	AP-120 & AP-121	AP-124 & AP-125	AP-134 & AP-135
Form Factor				In			
Applications ^[1]	Description	The multifunction AP-68 and AP-68P[2] are low-cost 802.11n access points (APs) for small, very low-density deployments in offices, hospitals, schools and retail stores. The non-MIMO AP-68 has one 2.4-GHz radio with 100-milliwatt transmit power and two internal antennas while the AP-68P has one 2.4-GHz radio with 500-milliwatt transmit power and an external antenna. Both APs provide WLAN access with part-time air monitoring, dedicated air monitoring for wireless IPS, Remote AP (RAP) functionality or secure enterprise mesh.	The multifunction AP-92 and AP- 93 are entry-level indoor 802.11n access points (APs) designed for low-density deployments in offices, hospitals, schools and retail stores. The AP-92 features a single 2x2 MIMO dual-band 2.4-GHz/5-GHz radio with external antennas while the AP-93 features the same radio with internal antennas. Both APs can provide WLAN access with part-time air monitoring for wireless IPS and spectrum analysis, dedicated air monitoring for wireless IPS and spectrum analysis, Remote AP (RAP) functionality or secure enterprise mesh.	The multifunction AP-105 is an affordable indoor 802.11n access point (AP) designed for high-density deployments in offices, hospitals, schools and retail stores. It features two 2x2 MIMO dual-band 2.4-GHz/5- GHz radios with two internal omni-directional antennas, plus ceiling and wall mounting options. The AP-105 can provide WLAN access with part-time air monitoring for wireless IPS and spectrum analysis, dedicated air monitoring for wireless IPS and spectrum analysis, Remote AP (RAP) functionality or secure enterprise mesh.	The multifunction AP-120 and AP-121 are indoor 802.11n access points (APs) designed for maximum deployment flexibility in low-density environments that require above-ceiling or enclosure-based installations. The AP-120 features a single 3x3 MIMO dual-band 2.4-GHz/5GHz radio with detachable antenna interfaces while the AP-121 features the same radio with integrated antenna elements. Both APs can provide WLAN access with part-time air monitoring for wireless IPS and spectrum analysis, dedicated air monitoring for wireless IPS and spectrum analysis, Remote AP (RAP) functionality or secure enterprise mesh.	The multifunction AP-124 and AP-125 are ultra-high-performance indoor 802.11n access points (APs) designed for maximum deployment flexibility in high-density environments. The AP-124 features two 3x3:2 MIMO ratios (2.4GHz / 5GHz) with external antenna interfaces while the AP-125 features the same radios with integrated antenna elements. Both APs can provide WLAN access with part- time air monitoring for wireless IPS and spectrum analysis, dedicated air monitoring for wireless IPS and spectrum analysis, Remote AP (RAP) functionality or secure enterprise mesh.	The two-radio, multifunction AP-134 and AP-135 are ultra-high- performance indoor 802.11n access points (APs) designed for high-density environments. The AP-134 features two 3x3:3 MIMO radios (2.4GHz / 5GHz) with external antenna interfaces while the AP-135 features the same radios with integrated antenna elements. Compared to 3x3:2 and 2x2:2 MIMO radios, AP-134 and 135 radios offer 50% greater aggregate performance. Both APs can provide WLAN access with part-time air monitoring for wireless IPS and spectrum analysis, dedicated air monitoring for wireless IPS and spectrum analysis, Remote AP (RAP) functionality or secure enterprise mesh.
	Campus AP	Yes (ArubaOS 6.0+)	Yes (ArubaOS 5.0.1+)	Yes (ArubaOS 3.3.3+ or ArubaOS 3.4.1+)	Yes	Yes	Yes (ArubaOS 6.1+)
	Remote AP	Yes (ArubaOS 6.0+)	Yes (ArubaOS 5.0.1+)	Yes (ArubaOS 3.3.3+ or ArubaOS 3.4.1+)	Yes (ArubaOS 3.3.2+)	Yes (ArubaOS 3.3.2+)	Yes (ArubaOS 6.1+)
	Mesh	Yes (ArubaOS 6.0+)	Yes (ArubaOS 5.0.1+)	Yes (ArubaOS 3.3.3+ or ArubaOS 3.4.1+)	Yes (ArubaOS 3.4+)	Yes (ArubaOS 3.4+)	Yes (ArubaOS 6.1+)
	Remote Mesh	Yes (ArubaOS 6.0+)	Yes (ArubaOS 5.0.1+)	Yes (ArubaOS 3.4.1+)	Yes (ArubaOS 3.4+)	Yes (ArubaOS 3.4+)	Yes (ArubaOS 6.1+)
	Air Monitor (AM)	Yes (ArubaOS 6.0+)	Yes (ArubaOS 5.0.1+)	Yes (ArubaOS 3.3.3+ or ArubaOS 3.4.1+)	Yes	Yes	Yes (ArubaOS 6.1+)
	AP and AM	Yes (ArubaOS 6.0+)	Yes (ArubaOS 5.0.1+)	Yes (ArubaOS 3.3.3+ or ArubaOS 3.4.1+)	Yes	Yes	Yes (ArubaOS 6.1+)
	Spectrum Analysis	No.	Yes. Spectrum analysis (enabled with ArubaOS 6.0+) remotely scans the 2.4-GHz and 5-GHz radio bands to identify sources of RF interference. This provides visibility into non-802.11 RF interference sources and their effect on 802.11 channel quality. Monitors 4.9GHz frequency band when in dedicated Air Monitor (AM) mode.		Yes. Spectrum analysis (enabled with ArubaOS 6.0+) remotely scans the 2.4-GHz and 5-GHz radio bands to identify sources of RF interference. This provides visibility into non-802.11 RF interference sources and their effect on 802.11 channel quality. Interference classification, real-time FFT and Spectograms are not supported on AP-12x series. Monitors 4.9GHz frequency band when in dedicated Air Monitor (AM) mode.		Yes. Spectrum analysis remotely scans the 2.4-GHz and 5-GHz radio bands to identify sources of RF inter- ference. This provides visibility into non-802.11 RF interference sources and their effect on 802.11 channel quality.

4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

ARUBA INDOOR 802.11a/b/g/n ACCESS POINT PRODUCT LINE MATRIX

Model		AP-68 & AP-68P	AP-92 & AP-93	AP-105	AP-120 & AP-121	AP-124 & AP-125	AP-134 & AP-135	
Number of Radio	os	Single Radio	Single Radio	Dual Radio ^[3]	Single Radio	Dual Radio ^[3]	Dual Radio ^[3]	
Operating Frequencies 2.4-2.5 GHz Radio channel availability is centrally managed by the controller, based on configured regulatory domain		2.4-2.5 GHz 5.150-5.950 GHz Radio channel availability is centrally managed by the controller, based on configured regulatory domain						
DFS Support No		Not applicable	Yes (ETSI/EU, MKK/JP), planned (FCC/US)	Yes (ETSI/EU, MKK/JP), planned (FCC/US)	Yes	Yes	Yes (ETSI/EU, MKK/JP), planned (FCC/US)	
RF Management	F Management Adaptive Radio Management (ARM) provides dynamic, application-aware channel management to maximize network capacity and ensure fairness in bandwidth availability per user. Capabilities include adaptive power and channel assignments, coordinated access to a single channel, band steering, channel load balancing, airtime fairness, airtime performance protection and coverage hole detection. In addition, spectrum analysis remotely scans the 2.4-GHz and 5-radio bands to identify sources of RF interference. This provides visibility into non-802.11 RF interference sources and their effect on 802.11 channel quality.							
Antennas (<u>Click here</u> to view the Antenna Product Line Matrix.)		AP-68: Integrated, omni-directional antenna elements (supporting receive spatial diversity). Antenna gain: 3 dBi (max) AP-68P (available only in China): RP-SMA interface for external antenna support	AP-92: Dual RP-SMA interfaces for external dual-band antenna (supports 2x2 MIMO spatial diversity) AP-93: Integrated, dual, omni-directional dual-band dipole (supports 2x2 MIMO spatial diversity)	Integral, Dual, Omni-directional Dual-Band dipole (supports 2x2 MIMO spatial diversity)	AP-120: Tri (3x3), RP-SMA interfaces for external antenna support (supports 3x3 and below MIMO spatial diversity) AP-121: Integral, Tri (3x3), Omni-directional Dual-Band dipole (supports 3x3 and below MIMO spatial diversity)	AP-124: Tri (3x3), RP-SMA interfaces for external antenna support (supports 3x3 and below MIMO spatial diversity) AP-125: Integral, Tri (3x3), Omni-directional Dual-Band dipole (supports 3x3 and below MIMO spatial diversity)	AP-134: Three RP-SMA antenna interfaces for external dual-band antennas (supports 3x3 and below MIMO spatia diversity) AP-135: Six internal downtilt omnidirectional antennas; 3 per frequency band (supports 3x3 and below MIMO spatia diversity)	
Network Interfaces		1 x 10/100BASE-T Ethernet (RJ- 45), au to-sensing link speed an d MDI/MDX	1x10/100/1000BASE-T Ethernet (RJ-45), auto-sensing link speed and MDI/MDX	1x10/100/1000BASE-T Ethernet (RJ45), Auto-sensing link speed and MDI/MDX	2x100/1000BASE-T Ethernet (RJ45) , Auto-sensing link speed and MDI/ MDX	2x100/1000BASE-T Ethernet (RJ45) , Auto-sensing link speed and MDI/ MDX	2x100/1000BASE-T Ethernet (RJ45), Auto-sensing link speed and MDI/DX Supports MACSec encryption, 802.3az (EEE)	
Other Interfaces		Console interface (RJ-45)	Console interface (RJ-45)	Console interface (RJ45)	Console interface (RJ45)	Console interface (RJ45)	Console interface (RJ45)	
Power over Ethernet (PoE) Interfaces		48 V DC 802.3af compliant	48 V DC 802.3af compliant	48 V DC 802.3af compliant	48 V DC 802.3af or 802.3at or PoE + inter operable with intelli-source PSE sourcing intelligence (both ports)	48 V DC 802.3af or 802.3at or PoE + inter operable with intelli-source PSE sourcing intelligence (both ports)	48 V DC 802.3af or 802.3at or PoE+ inter operable with intelli-source PS sourcing intelligence (both ports)	
DC Power Interfaces		12 V	12 V, 1.25 A	12 V , 1.25 A	5 V, 2.4 A	5 V, 3.2 A	12 V, 1.25A	
Power Consumption		8 watts (maximum)	10 watts (maximum)	12.5 watts (maximum)	12 watts (maximum)	16 watts (maximum)	15 watts (maximum)	
Environmental	Class	Indoor	Indoor, plenum-rated	Indoor, plenum-rated	Indoor, plenum-rated	Indoor, plenum-rated	Indoor, plenum-rated	
	Operating Temperature	0° C to +40° C (+32° F to +104° F)	0° C to +50° C (+32° F to +122° F)	0° C to +50° C (+32° F to +122° F)	0° C to +50° C (+32° F to +122° F)	0° C to +50° C (+32° F to +122° F)	0° C to +50° C (+32° F to +122° F)	

[1] Number in parenthesis indicates minimum ArubaOS version

[2] Available in China only

[3] Concurrent operation of both radios in the same frequency band (2.4 GHz / 5 GHz) is not supported



4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

ARUBA INDOOR 802.11a/b/g/n ACCESS POINT PRODUCT LINE MATRIX

Model		AP-68 & AP-68P	AP-92 & AP-93	AP-105	AP-120 & AP-121	AP-124 & AP-125	AP-134 & AP-135
ТАА		Planned	Planned	Yes	No	No	No
TAA/FIPS (AP HW)		Planned	Planned	Planned	No	Yes	Planned
FIPS (SW)		Planned	Planned	Planned	ArubaOS 3.3-FIPS	ArubaOS 3.3-FIPS	Planned
CC-EAL		Planned	Planned	Planned	Planned	Planned	Planned
Part Numbers	Access Points	AP-68 (802.11b/g/n: integrated antennas) AP-68P (available only in China) (high power 802.11b/g/n: antenna connector)	AP-92 (802.11a/n or 802.11b/g/n with antenna connectors) AP-93 (802.11a/n or 802.11b/g/n with integrated antenna) AP-93 (802.11a/n or 802.11b/g/n with integrated antenna)	AP-105 (802.11a/n and 802.11b/g/n)	AP-120 (802.11a/n or 802.11b/g/n only) AP-121 (802.11a/n or 802.11b/g/n only)	AP-124 (802.11a/n and 802.11b/g/n) AP-125 (802.11a/n and 802.11b/g/n)	AP-134 (802.11a/n and 802.11b/g/n) AP-135 (802.11a/n and 802.11b/g/n) Note: units ship with ceiling rail mount adapters
	Accessories	None	AP-90-MNT	AP-105-MNT: Wall-mount cradle brackets (Note: Blocks DC power connector) AP-105-MNT-C: Ceiling-tile rail adapter	AP-120-MNT (mount kit) AP-120-MNT-WJ (wall jack mounting kit) AP-120-MNT-CV (cover mounting kit)		AP-130-MNT: Wall-mount bracket
	Attachable Antennas	Not supported	AP-92: See <u>Antenna Matrix</u> AP-93: Not supported	Not supported	AP-120: See <u>Antenna Matrix</u> AP-121: Not supported	AP-124: See <u>Antenna Matrix</u> AP-125: Not supported	AP-134: See Antenna Matrix AP-135: Not supported
	AC Power Adapters	AP-AC-UN (universal)	AP-AC-UN (universal)	AP-AC-UN (universal)	AP-AC-AUS-2 (Australia) AP-AC-BR-2 (Brazil) AP-AC-CHN-2 (China) AP-AC-EC-2 (Central Europe) AP-AC-IN-2 (India) AP-AC-IT-2 (Italy) AP-AC-JPN-2 (Japan) AP-AC-KOR-2 (Korea) AP-AC-NA-2 / AP-AC-LA-2 (North America) AP-AC-UK-2 (UK)		AP-AC-UN
Product Warranty		1 year parts and labor	Limited lifetime	Limited lifetime	Limited lifetime	Limited lifetime	Limited lifetime



4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299