DUAL RADIO 802.11A/B/G/N WIRELESS ACCESS POINT

AP 622

With increasing number of Wi-Fi enabled devices and bandwidth heavy applications connecting to your wireless network, you need a cost-effective solution that delivers high performance. The AP 622 combines the power of WiNG 5 intelligence at the edge with the cost-efficiency of a dependent access point. When deployed with a wireless controller, the AP 622 offers top 802.11a/b/g/n performance along with direct forwarding, security and quality of service (QoS) services at the edge to deliver a better experience.

DUAL RADIOS MEAN NO DUELING APPLICATIONS

The AP 622 is a dependent dual radio access point designed to lower the cost of deploying and operating a secure, reliable 802.11n wireless LAN. The access point features dual MIMO radios and a GigE WAN uplink port. One radio can be used for client access while the second radio is used for simultaneous client access on a different frequency band or as a dedicated sensor on both 2.4 and 5.0 GHz bands for security and troubleshooting. WiNG 5 intelligence ensures traffic is locally forwarded along the most efficient paths without sacrificing QoS and security is implemented at the access point itself.

OUT-OF-THE-BOX FUNCTIONALITY

Out-of-the-box, this access point supports voice over wireless LAN (VoWLAN) QoS, which ensures toll-quality even with many simultaneous VoWLAN calls on a single access point. Locationing services over 802.11 provide the ability to locate and track people or assets, and even to control access to the network or applications. In addition, its easy to provide hotspot and guest access and assure the user can only access authorized networks, sites, or applications.

HIGH RELIABILITY AND SMART RF

Common problems such as building attenuation, electronic interference or sub-optimal access point placement are minimized as the SMART RF feature automatically optimizes power and channel selection so each user gets always-on high-quality access and mobility.

The AP 622 is designed to optimize network availability through its central and pre-emptive intelligence which dynamically senses weak or failing signals, securely moves mobile users to alternate APs, and boosts signal power to automatically fill RF holes and ensure uninterrupted mobile user access.

GAP-FREE SECURITY

Security includes layer 2-7 stateful packet filtering firewall, AAA RADIUS services, Wireless IPS-lite, VPN gateway, and location-based access control.

By adding Airdefense Security and Network Assurance tools, operators of Wireless LANs get a more secure network that delivers better performance and more cost-effective deployments. Our Radioshare feature increases the integration between sensor radios and client access radios by enabling sharing of information to support threat detection and mitigation. The result - you get a wireless network with fewer dedicated sensor radios while achieving improved security and network assurance performance.

LESS IS MORE

Motorola's WiNG 5 WLAN solutions offer all the benefits of 11n—and then some. Our distributed architecture extends QoS, security and mobility services to the APs so you get better direct routing and network resilience. That means no bottleneck at the wireless controller, no latency issues for voice applications, and no jitter in your streaming video. And with our broad selection of access points and flexible network configurations, you get the network you need with less hardware to buy. Let us show you the less complicated, less expensive way to more capacity, more agility, and more satisfied users.

FAST AND EASY DEPLOYMENT

The access ports require no configuration or manual firmware maintenance. The Motorola wireless controller discovers access points on the network and automatically downloads all configuration parameters and firmware, greatly reducing installation, maintenance and trouble-shooting costs for Layer 2 and Layer 3 deployments.

COMPREHENSIVE WIRELESS LAN SERVICES

Motorola's comprehensive portfolio of Services offerings is built upon a lifecycle approach to help you at every phase: Professional, Integration, Support and Managed Services. We provide the right Services to help you exceed your organizational goals. Our deep domain expertise in government and enterprise technologies gives us the unique ability to transform technology into powerful solutions.

AP 622 SPECIFICATIONS CHART

PHYSICAL CHARACTERISTICS	AP 622 (INTERNAL ANTENNA)	AP 622 (EXTERNAL ANTENNA)
Dimensions:	7.5W x 9.5L x 1.1H	5.0W x 7.8L x 1.0H
Weight:	0.85 lbs	1.75 lbs
Part number:	AP-0622-66030-US & -WR	AP-0622-66040-US & -WR
Available mounting configurations:	Wall, Ceiling , Open Beam (with KT-135628-01)	Wall, Open Beam, Ceiling (with KT-135628-01)
LED indicators:	Yes	

WIRELESS DATA COMMUNICATIONS AND NETWORKING	
Data rates supported:	802.11b/g: 1,2,5.5,11,6,9,12,18,24,36,48, and 54Mbps 802.11a: 6,9,12,18,24,36,48, and 54Mbps, 802.11n: MCS 0-15 up to 300Mbps
Network standard:	802.11a, 802.11b, 802.11g, 802.11n
Wireless medium:	Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM), and Spatial Multiplexing (MIMO)
VLANs/WLANs supported:	VLANs and WLANs are controller-dependent
Uplink:	Auto-sensing 10/100/1000Base-T Ethernet

RADIO CHARACTERISTICS	
Operating channels:	**Radio 1:** 2.4GHz: Chan 1-13 (2412-2472 MHz), Chan 14 (2484 MHz) Japan only **Radio 2:** 2.4GHz: Chan 1-13 (2412-2472 MHz), Chan 14 (2484 MHz) Japan only 5GHz: All channels from 5200 MHz to 5825 MHz Actual operating frequencies depend on national regulatory limits
Maximum available transmit power:	2.4GHz: 21dBm per chain, 5.0GHz: 20dBm per chain
Transmit power Adjustment:	1dB increment
Antenna configuration:	1x1, 1x2, 2x2
Operating bands:	2412 to 2472 MHz and 2484 MHz, 5180 to 5825 MHz

USER ENVIRONMENT	
Operating temperature:	0 to 40°C
Storage temperature:	-40 to 85°C
Operating humidity:	5 to 95% RH, non-condensing
Operating altitude:	8,000 ft @ 28°C
Storage humidity:	85% RH, non-condensing
Storage altitude:	30,000 ft @ 12°C
Electrostatic discharge:	15kV air and 8kV contact @ 50% RH

POWER SPECIFICATIONS	
Operating voltage:	48Vdc (PoE in) / 12Vdc (Aux in)
Operating current:	0.25A (PoE) / 1.0A (Aux)
DC Power Consumption:	12W Max

MAXIMUM RADIO TRANSMIT POWER:

BAND	SINGLE ANTENNA TRANSMIT POWER	DUAL ANTENNA COMPOSITE TRANSMIT POWER
2400MHZ	+21 dBm	+24 dBm
5200MHZ	+20 dBm	+23 dBm

INTERNAL ANTENNA INFORMATION

INTERNAL ANTENNA DESCRIPTION	VALUES
Radio 1: 2.4GHz band	3.9dBi
Radio 2: 2.4GHz band	4.4dBi
Radio 2: 5.0GHz band	7.5dBi

REGULATORY	
Product safety certifications:	UL 60950, cUL, EU EN 60950, TUV and UL 2043 (external antenna)
Radio approvals:	FCC (USA), Industry Canada, CE (Europe) and TELEC pending (Japan)

FEATURES

Full 802.11n performance with standard 802.3af
Simplifies and reduces total cost of installation using standard Power-over-Ethernet (PoE)

Dual Radio Design
Radios can be configured for client access on 2.4Ghz and 5.0Ghz or independently used with one radio for client access and the second radio for sensing

Multiband Operation
Allows concurrent sensing on 2.4 Ghz and 5.0 Ghz frequency bands for multi-band intrusion protection or troubleshooting

Mobility
Supports fast secure roaming

Application Support
Supports Call Admission Control, for optimized VoWLAN performance, as well as video streaming and data throughput for 802.11 a/b/g/n clients

Load balancing, pre-emptive roaming and rate scaling
Increases reliability and resilience of the wireless network to support mission critical applications

CONDUCTED RECEIVER SENSITIVITY (ANTENNA ELEMENT NOT INCLUDED)

(typical) at antenna housing connector, 2400MHz band

Rate/MCS	Mode	Sensitivity (dBm)
1	Legacy	-91
2	Legacy	-90
5.5	Legacy	-90
11	Legacy	-88
6	Legacy	-91
9	Legacy	-91
12	Legacy	-91
18	Legacy	-88
24	Legacy	-85
36	Legacy	-81
48	Legacy	-78
54	Legacy	-76
MCS0	HT20	-91
MCS1	HT20	-89
MCS2	HT20	-87
MCS3	HT20	-83
MCS4	HT20	-80
MCS5	HT20	-76
MCS6	HT20	-75
MCS7	HT20	-73
MCS8	HT20	-88
MCS9	HT20	-85
MCS10	HT20	-83
MCS11	HT20	-80
MCS12	HT20	-78
MCS13	HT20	-73
MCS14	HT20	-71
MCS15	HT20	-70
MCS0	HT40	-87
MCS1	HT40	-85
MCS2	HT40	-83
MCS3	HT40	-80
MCS4	HT40	-77
MCS5	HT40	-73
MCS6	HT40	-72
MCS7	HT40	-70
MCS8	HT40	-85
MCS9	HT40	-82
MCS10	HT40	-79
MCS11	HT40	-77
MCS12	HT40	-74
MCS13	HT40	-69
MCS14	HT40	-67
MCS15	HT40	-66

CONDUCTED RECEIVER SENSITIVITY (ANTENNA ELEMENT NOT INCLUDED)

(typical) at antenna housing connector, 5200MHz band

Rate/MCS	Mode	Sensitivity (dBm)
6	Legacy	-91
9	Legacy	-91
12	Legacy	-91
18	Legacy	-88
24	Legacy	-85
36	Legacy	-81
48	Legacy	-78
54	Legacy	-76
MCS0	HT20	-91
MCS1	HT20	-89
MCS2	HT20	-88
MCS3	HT20	-83
MCS4	HT20	-80
MCS5	HT20	-76
MCS6	HT20	-75
MCS7	HT20	-73
MCS8	HT20	-88
MCS9	HT20	-85
MCS10	HT20	-83
MCS11	HT20	-80
MCS12	HT20	-78
MCS13	HT20	-73
MCS14	HT20	-71
MCS15	HT20	-70
MCS0	HT40	-87
MCS1	HT40	-85
MCS2	HT40	-83
MCS3	HT40	-80
MCS4	HT40	-78
MCS5	HT40	-73
MCS6	HT40	-72
MCS7	HT40	-70
MCS8	HT40	-85
MCS9	HT40	-82
MCS10	HT40	-79
MCS11	HT40	-77
MCS12	HT40	-74
MCS13	HT40	-69
MCS14	HT40	-67
MCS15	HT40	-66

Wi Fi® CERTIFIED

For more information on how the AP 622 can benefit your business, please visit us on the web at www.motorolasolutions.com/wlan or access our global contact directory at www.motorolasolutions.com/enterprisemobility/contactus

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