HIGH PERFORMANCE DUAL RADIO 802.11N ACCESS POINT

AP 6532

The AP 6532 is a performance-focused 802.11n access point that offers higher throughput along with WiNG 5's direct forwarding, security, QoS services and site survivability. The second radio can be used for access or as a sensor for troubleshooting and security. With it's WiNG 5 intelligence, this access point can serve as a virtual controller and coordinate the operation of up to 24 neighboring access points.

AUTOMATIC CHANNEL AND POWER OPTIMIZATION

Common problems such as building attenuation, electronic interference or sub-optimal access point placement are minimalized as the AP 6532's SMART RF feature automatically optimizes power and channel selection so each user gets always-on high-quality access and mobility.

HIGH RELIABILITY

The AP 6532 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. The access point will also continue to run if it's connection to a local or remote controller is interrupted. Working with other local access points, the wireless network continues to function with full direct forwarding, QoS and security while also keeping users connected to local application servers.

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. Users can also add role-based access control and AirDefense Wireless IPS and Rogue detection for premium-level security vigilance. Because the sensor supports simultaneous multi-band sensing (band un-locked) for both 2.4 GHz and 5.0 GHz spectrums, the Wireless IPS and rogue detection is always-on with no timeslicing.

FULL PERFORMANCE USING STANDARD POE

The AP 6532 is designed to provide full 802.11n performance using standard and lower cost POE 802.3 (af).

DEVICE MOBILITY

Supports fast, secure roaming at Layer 2 and Layer 3. In addition, the network optimizes mobile performance with load balancing, pre-emptive roaming and rate scaling.

GREATER COVERAGE PER AP

The powerful 24 dBm radio increases coverage, performance and obstruction penetration versus 23 dBm radios. In addition, receiver sensitivity has been increased proportionally so users have an increased ability to maintain high-performance access through thick doors and walls to users even while on-the-move.

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.

VOICE, LOCATIONING, HOTSPOTS, GUEST ACCESS

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.

DEVICE AND NETWORK ACCELERATION

Device and network performance can be accelerated through a virtual LAN feature via the switch/controller.

Each access point can be virtualized into four unique VLANs which can be customized to direct broadcast traffic to the intended recipient. This reduces overall network traffic while improving device performance and battery life up — to 25%. This also reduces the overall number of access points required to provide unique device services.

SIMPLE DEPLOYMENT AND MAINTENANCE

The access point requires 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 troubleshooting costs for Layer 2 and Layer 3 deployments.

FEATURES

Full 802.11n performance with standard 802.3af

Simplifies and reduces total cost of installation using standard Power-over-Ethernet (PoE)

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

Security

This unique multi-purpose device can execute and enforce the IDS/IPS security policies configured in the Motorola wireless switch, and can also be utilized as a 24x7 dedicated sensor with Wireless IPS from AirDefense

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

AP 6532 SPECIFICATIONS CHART

PHYSICAL CHARACTERISTICS	AP 6532 (INTERNAL ANTENNA)	AP 6532 (EXTERNAL ANTENNA)
Dimensions:	9.5 in. L x 7.5 in. W x 1.7 in. H 24.13 cm L x 18.916 cm W x 4.36 cm H	8.5 in. L x 5.6 in. W x 1.5 in. H 21.64 cm L x 14.10 cm W x 3.771 cm H
Weight:	2.0 lbs./.91 kg	2.5 lbs./1.14 kg
Part number:	AP-6532-66030-OUS: internal antenna, US legal outdoors AP-6532-66030-US: internal antenna, US AP-6532-66030-WW: internal antenna, non-US AP-6532-66040-OUS: external antenna, US legal outdoors AP-6532-66040-US: external antenna, US AP-6532-66040-WW: external antenna, non-US	
Available mounting configurations:	Ceiling-mount (to suspended ceiling T-bars, below tile); wall mount	Ceiling-mount (above tile); wall-mount
Plenum rated:	No	Yes, certified to UL 2043
LED indicators:	2 LED indicators with multiple modes indicating 2.4GHz/5 GHz Activity, Power, Adoption and Errors	
WIRELESS DATA COMMUNICATIONS AND NETWORKING		
Data rates supported:	802.11b/g: 1,2,5.5,11,6,9,12,18,24,36,48, and 54Mbps802.11a: 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:	5GHz: All channels from 4920 MHz to 5825 MHz 2.4GHz: Chan 1-13 (2412-2472 MHz), Chan 14 (2484 MHz) Japan only Actual operating frequencies depend on national regulatory limits	
Maximum available transmit power:	21dBm	
Transmit power Adjustment:	1dB increments	
Antenna configuration:	2x3 MIMO (transmit on two and receive on all three antennas)	
Operating bands:	FCC EU 2.412 to 2.462 GHz 2.412 to 2.472 GHz 5.150 to 5.250 (UNII -1) 5.150 to 5.250 GHz 5.725 to 5.825 (UNII -3) 5.150 to 5.350 GHz 5.725 to 5.850 (ISM) 5.470 to 5.725 GHz (Country Specific) Japan 2.412 to 2.484GHz 4.900 to 5.000 GHz 5.150 to 5.250 GHz	

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AP 6532 SPECIFICATIONS CHART (continued)

USER ENVIRONMENT	AP 6532 (INTERNAL ANTENNA)	AP 6532 (EXTERNAL ANTENNA)
Operating temperature:	32°F to 122° F/0°C to 50° C	
Storage temperature:	-40°F to 158° F/-40°C to 70° C	
Operating humidity:	5%-95% (non-condensing)	
Operating altitude:	8,000 ft./2438 m	
Storage altitude:	15,000 ft./4572 m	
Electrostatic discharge:	+/- 15 kV (Air), +/- 8 kV (contact)	

POWER SPECIFICATIONS	
Operating voltage:	802.3af supply: 48 VDC @ 12.95W (typical), 36 VDC to 57 VDC (range)
Operating current:	270mA (typical)
Integrated Power-over-Ethernet support:	Standards-based IEEE 802.3af

MAXIMUM RADIO TRANSMIT POWER:

BAND	SINGLE ANTENNA COMPOSITE TRANSMIT POWER	DUAL ANTENNA COMPOSITE TRANSMIT POWER
2400MHZ	+21 dBm	+24 dBm
5200MHZ	+19dBm	+22 dBm

TYPICAL RMS POWER CONSUMPTION

Option1	DC VOLTAGE	DC AMPS	DC POWER CONSUMPTION
1	48V	270mA	12.95W
2	48V	209mA	10.00W

ANTENNA SPECIFICATIONS		
Type:	Integrated 2.4 GHz and 5.2 GHz Dual-Antenna Elements	Six RSMA connectors for external antennas (not included)
Band:	2.4 GHz to 2.5 GHz; 4.9 GHz to 5.850 GHz (actual operating frequencies depend on regulatory rules and certification agency)	
Gain:	2.0 dBi (2.4GHz), 4.8dBi (5GHz)	Antenna-specific

INTERNAL ANTENNA INFORMATION

INTERNAL ANTENNA DESCRIPTION	VALUES
Peak gain, 2.4GHz band	2.0dBi
Peak gain, 5.2GHz band	4.8dBi

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 (Japan)

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Load balancing, pre-emptive roaming and rate scaling

Increases reliability and resilience of the wireless network to support mission critical applications

Dual form-factors

Plenum-rated external antenna model with metal housing is ideal for installation above ceiling tiles; the plastic internal-antenna housing allows for installation within the "carpeted-space" and provides cost-effective coverage via the integrated 2.4 GHz and 5.2 GHz antennas

Flexible mounting options

Fast and easy installation with wall, ceiling and above-ceiling tile mounting options; internal antenna version snaps on to T-bars of suspended ceilings without the use of any hardware; external antenna version installs above ceiling tiles

RECEIVER SENSITIVITY

(maximum) at antenna housing connector (metal housing), 2400MHz band

Rate/MCS	Mode	Average sens (dBm)
1	Legacy	-96
2	Legacy	-94
5.5	Legacy	-93
11	Legacy	-91
6	Legacy	-94
9	Legacy	-94
12	Legacy	-94
18	Legacy	-94
24	Legacy	-90
36	Legacy	-87
48	Legacy	-83
54	Legacy	-82
MCS0	HT20	-95
MCS1	HT20	-93
MCS2	HT20	-91
MCS3	HT20	-88
MCS4	HT20	-84
MCS5	HT20	-80
MCS6	HT20	-79
MCS7	HT20	-78
MCS8	HT20	-94
MCS9	HT20	-91
MCS10	HT20	-88
MCS11	HT20	-85
MCS12	HT20	-82
MCS13	HT20	-78
MCS14	HT20	-77
MCS15	HT20	-76
MCS0	HT40	-90
MCS1	HT40	-89
MCS2	HT40	-87
MCS3	HT40	-84
MCS4	HT40	-82
MCS5	HT40	-78
MCS6	HT40	-77
MCS7	HT40	-75
MCS8	HT40	-90
MCS9	HT40	-87
MCS10	HT40	-85
MCS11	HT40	-83
MCS12	HT40	-79
MCS13	HT40	-75
MCS14	HT40	-74
MCS15	HT40	-72

RECEIVER SENSITIVITY

(maximum) at antenna housing connector (metal housing), 5200MHz band

Rate/MCS	Mode	Average sens (dBm)
6	Legacy	-94
9	Legacy	-94
12	Legacy	-94
18	Legacy	-93
24	Legacy	-90
36	Legacy	-87
48	Legacy	-83
54	Legacy	-81
MCS0	HT20	-94
MCS1	HT20	-93
MCS2	HT20	-91
MCS3	HT20	-87
MCS4	HT20	-84
MCS5	HT20	-80
MCS6	HT20	-79
MCS7	HT20	-77
MCS8	HT20	-93
MCS9	HT20	-90
MCS10	HT20	-88
MCS11	HT20	-85
MCS12	HT20	-82
MCS13	HT20	-78
MCS14	HT20	-76
MCS15	HT20	-74
MCS0	HT40	-91
MCS1	HT40	-89
MCS2	HT40	-87
MCS3	HT40	-84
MCS4	HT40	-81
MCS5	HT40	-76
MCS6	HT40	-75
MCS7	HT40	-73
MCS8	HT40	-90
MCS9	HT40	-87
MCS10	HT40	-85
MCS11	HT40	-82
MCS12	HT40	-79
MCS13	HT40	-74
MCS14	HT40	-72
MCS15	HT40	-71

For more information on how the AP 6532 can benefit your business, please visit us on the web at motorola.com/wlan or access our global contact directory at www.motorola.com/enterprisemobility/contactus

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