



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 its WiNG 5 intelligence, this access point can serve as a virtual controller and coordinate the operation of up to 23 neighboring access points.

AUTOMATIC CHANNEL AND POWER OPTIMIZATION

Common problems such as building attenuation, electronic interference or sub-optimal access point placement are minimized 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 its 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-6532-66030-0US: internal antenna, US legal outdoors AP-6532-66030-US: internal antenna, US AP-6532-66030-WW: internal antenna, non-US AP-6532-66040-0US: 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 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: | 24dBm | |
| 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) | |
| VSWR: | < 2:1 | Antenna-specific |
| Gain: | 2.0 dBi (2.4GHz), 4.8dBi (5GHz) | Antenna-specific |

INTERNAL ANTENNA INFORMATION

| INTERNAL ANTENNA DESCRIPTION | VALUES |
|------------------------------|--------|
| VSWR | < 2:1 |
| 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

PRODUCT SPEC SHEET

AP 6532

RECEIVER SENSITIVITY

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

| Rate/MCS | Mode | Average sens (dBm) |
|----------|--------|--------------------|
| 1 | Legacy | -95 |
| 2 | Legacy | -94 |
| 5.5 | Legacy | -93 |
| 11 | Legacy | -90 |
| 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 | -94 |
| MCS1 | HT20 | -93 |
| MCS2 | HT20 | -91 |
| MCS3 | HT20 | -87 |
| MCS4 | HT20 | -84 |
| MCS5 | HT20 | -80 |
| MCS6 | HT20 | -79 |
| MCS7 | HT20 | -77 |
| MCS8 | HT20 | -94 |
| MCS9 | HT20 | -91 |
| MCS10 | HT20 | -88 |
| MCS11 | HT20 | -85 |
| MCS12 | HT20 | -82 |
| MCS13 | HT20 | -78 |
| MCS14 | HT20 | -77 |
| MCS15 | HT20 | -75 |
| MCS0 | HT40 | -88 |
| MCS1 | HT40 | -88 |
| MCS2 | HT40 | -87 |
| MCS3 | HT40 | -84 |
| MCS4 | HT40 | -82 |
| MCS5 | HT40 | -77 |
| MCS6 | HT40 | -76 |
| MCS7 | HT40 | -74 |
| MCS8 | HT40 | -88 |
| MCS9 | HT40 | -87 |
| MCS10 | HT40 | -85 |
| MCS11 | HT40 | -82 |
| MCS12 | HT40 | -79 |
| MCS13 | HT40 | -75 |
| MCS14 | HT40 | -73 |
| MCS15 | HT40 | -71 |

RECEIVER SENSITIVITY

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

| Rate/MCS | Mode | Average sens (dBm) |
|----------|--------|--------------------|
| 6 | Legacy | -93 |
| 9 | Legacy | -93 |
| 12 | Legacy | -93 |
| 18 | Legacy | -92 |
| 24 | Legacy | -89 |
| 36 | Legacy | -86 |
| 48 | Legacy | -82 |
| 54 | Legacy | -81 |
| MCS0 | HT20 | -93 |
| MCS1 | HT20 | -92 |
| MCS2 | HT20 | -90 |
| MCS3 | HT20 | -86 |
| MCS4 | HT20 | -83 |
| MCS5 | HT20 | -79 |
| MCS6 | HT20 | -78 |
| MCS7 | HT20 | -76 |
| MCS8 | HT20 | -93 |
| MCS9 | HT20 | -90 |
| MCS10 | HT20 | -87 |
| MCS11 | HT20 | -84 |
| MCS12 | HT20 | -81 |
| MCS13 | HT20 | -77 |
| MCS14 | HT20 | -75 |
| MCS15 | HT20 | -74 |
| MCS0 | HT40 | -90 |
| MCS1 | HT40 | -88 |
| MCS2 | HT40 | -86 |
| MCS3 | HT40 | -83 |
| MCS4 | HT40 | -80 |
| MCS5 | HT40 | -76 |
| MCS6 | HT40 | -74 |
| MCS7 | HT40 | -73 |
| MCS8 | HT40 | -89 |
| MCS9 | HT40 | -86 |
| MCS10 | HT40 | -84 |
| MCS11 | HT40 | -81 |
| MCS12 | HT40 | -78 |
| 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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