AP 6521





VERSATILE SINGLE RADIO 802.11A/B/G/N WIRELESS ACCESS POINT

AP 6521

The AP 6521 is a versatile access point with the cost-efficiency of a single radio. With it's WiNG 5 intelligence, this access point offers higher throughput along with direct forwarding, security, QoS services and site survivability. The AP 6521 can also serve as a virtual controller and coordinate the operation of up to 23 neighboring access points.

UNIQUE VALUE

The AP 6521 is a multipurpose access point designed to lower the cost of deploying and operating a secure, reliable 802.11n wireless LAN (WLAN) in branch offices or headquarters facilities. The access point features a MIMO radio, superior receive and transmit sensitivity, and a GigE WAN uplink port. The embedded WiNG 5 intelligence ensures that traffic is locally forwarded along the most efficient paths without sacrificing quality of service and security implemented at the access point itself. The AP 6521 can also be used as a sensor for both 2.4 Ghz and 5.0 Ghz frequency bands for multi-band intrusion protection or troubleshooting.

AUTOMATIC CHANNEL AND POWER OPTIMIZATION

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

HIGH RELIABILITY

The AP 6521 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.

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 troubleshooting costs for Layer 2 and Layer 3 deployments.

LESS IS MORE

Motorola's WiNG 5 WLAN solutions offer all the benefits of 11nand 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.

DEVICE AND NETWORK ACCELERATION

Device and network performance can be accelerated through a virtual LAN feature via the switch/controller. Each AP 6521 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.

AP 6521 SPECIFICATIONS CHART

| PHYSICAL CHARACTERISTICS | AP 6521 (INTERNAL ANTENNA) | AP 6521 (EXTERNAL ANTENNA) |
|------------------------------------|---|---|
| Dimensions: | 6.0 in. L x 5.5 in. W x 1.63 in. H 15.24 cm L x 13.97 cm W x 4.11 cm H | 6.0 in. L x 5.5 in. W x 1.63 in. H 15.24 cm L x 13.97 cm W x 4.11 cm H |
| Weight: | 2.0 lbs./.91 kg | 2.5 lbs./1.14 kg |
| Part number: | AP-6521-60010-US AP-6521-60010-WR | AP-6521-60020-US AP-6521-60020-OUS AP-6521-60020-WR |
| 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 COMMUNICATION | NS 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 5180 MHz to 5825 MHz 2.4GHz: 2412-2472 MHz Actual operating frequencies depend on national regulatory limits | |
| Maximum available transmit power: | 27dBm | |
| Transmit power Adjustment: | 1dB increments | |
| Antenna configuration: | 2x2 MIMO (transmit on two and receive on two 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 | |
| | | |

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FEATURES

Full 802.11n performance with standard 802.3af

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

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 6521 SPECIFICATIONS CHART (continued)

| AP 6521 (INTERNAL ANTENNA) AP 6521 (EXTERNAL ANTENNA) | |
|---|--|
| 32°F to 104° F/0°C to 40° C | |
| -40°F to 158° F/-40°C to 70° C | |
| 5%-95% (non-condensing) | |
| 8,000 ft./2438 m | |
| 15,000 ft./4572 m | |
| +/- 15 kV (Air), +/- 8 kV (contact) | |
| | |
| 802.3af supply: 48 VDC @ 12.95W (typical), 36 VDC to 57 VDC (range) | |
| 270mA rms at 48V | |
| t: Standards-based IEEE 802.3af | |
| | |

MAXIMUM RADIO TRANSMIT POWER:

| BAND | SINGLE ANTENNA COMPOSITE TRANSMIT POWER | DUAL ANTENNA COMPOSITE TRANSMIT POWER |
|---------|---|---------------------------------------|
| 2400MHZ | +27 dBm | +30 dBm |
| 5200MHZ | +22 dBm | +25 dBm |

TYPICAL OPERATIONAL RMS POWER CONSUMPTION

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

ANTENNA PORT SPECIFICATON

| Туре: | Integrated 2.4 GHz and 5.2 GHz Dual-Antenna Elements | Two RP-SMA connectors for external antennas (not included) |
|-------|---|--|
| Band: | 2.4 GHz to 2.5 GHz; 4.9 GHz to 5.180 GHz (actual operating frequencies depend on regulatory rules and certification agency) | |

INTERNAL ANTENNA INFORMATION

| INTERNAL ANTENNA DESCRIPTION | VALUES |
|------------------------------|--------|
| Peak gain, 2.4GHz band | 3.0dBi |
| Peak gain, 5.2GHz band | 6.0dBi |

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

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CONDUCTED RECEIVER SENSITIVITY (ANTENNA ELEMENT NOT INCLUDED)

(maximum) at antenna housing connector, 2400MHz band

CONDUCTED RECEIVER SENSITIVITY (ANTENNA ELEMENT NOT INCLUDED)

(maximum) at antenna housing connector, 5200MHz band

| Rate/MCS | Mode | Sensitivity (dBm) |
|----------|--------|-------------------|
| 6 | Legacy | -94 |
| 9 | Legacy | -93 |
| 12 | Legacy | -93 |
| 18 | Legacy | -91 |
| 24 | Legacy | -87 |
| 36 | Legacy | -84 |
| 48 | Legacy | -80 |
| 54 | Legacy | -79 |
| MCS0 | HT20 | -94 |
| MCS1 | HT20 | -92 |
| MCS2 | HT20 | -90 |
| MCS3 | HT20 | -86 |
| MCS4 | HT20 | -84 |
| MCS5 | HT20 | -79 |
| MCS6 | HT20 | -78 |
| MCS7 | HT20 | -76 |
| MCS8 | HT20 | -91 |
| MCS9 | HT20 | -88 |
| MCS10 | HT20 | -86 |
| MCS11 | HT20 | -83 |
| MCS12 | HT20 | -80 |
| MCS13 | HT20 | -75 |
| MCS14 | HT20 | -74 |
| MCS15 | HT20 | -72 |
| 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 | -88 |
| MCS9 | HT40 | -85 |
| MCS10 | HT40 | -82 |
| MCS11 | HT40 | -80 |
| MCS12 | HT40 | -76 |
| MCS13 | HT40 | -72 |
| MCS14 | HT40 | -71 |
| MCS15 | HT40 | -69 |

For more information on how the AP 6521 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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