



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

# AP 6522

Designed for small offices and retail locations, the AP 6522 can handle the increasing number of Wi-Fi enabled devices and bandwidth heavy applications connecting to your wireless network. The AP 6522 is a site survivable wireless access point that does not require a controller. With its WiNG 5 intelligence, this access point offers higher throughput along with direct forwarding, security, QoS services and site survivability. The AP 6522 can also serve as a virtual controller and coordinate the operation of up to 24 neighboring access points.

### MULTI-PURPOSE FOR MULTIPLE APPLICATIONS

The AP 6522 is a multipurpose access point designed to lower the cost of deploying and operating a secure, reliable 802.11n wireless LAN (WLAN). The access point features MIMO radios with superior receive and transmit sensitivity, a console port for configuration, and a GiGE LAN/WAN POE enabled port for local or remote network connectivity. This easy-to-deploy solution delivers the speed and reliability to support the increase in WLAN traffic from employees bringing their own devices (BYOD) and supports the most demanding applications, including real-time video and voice. 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. 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.

### MESH NETWORKING

To enable the extension of wireless network coverage to areas where ethernet cabling is cost-prohibitive or otherwise impractical, the AP 6522 can operate wirelessly, connecting to other access points for data backhaul, in a mesh topology. Enabling an array of applications over mesh, this feature offers a cost-effective way to extend the network, relying on a highly resilient, self-configuring system. Taking advantage of the dual-radio architecture and the easy-to-use configuration interface, it becomes a simple task to deploy a wireless network of access points connected securely via 802.11n, providing enterprise-class service.

### AUTOMATIC CHANNEL AND POWER OPTIMIZATION

Common problems such as building attenuation, electronic interference or sub-optimal access point placement are minimized 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 6522 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

The AP 6522 provides enterprise class security with layer 2-7 stateful packet filtering firewall, AAA RADIUS services, Wireless IPS-lite, VPN gateway, and location-based access control. The security capability of the AP 6522 is further enhanced when deployed in combination with premise or cloud-based versions of the AirDefense Services Platform which increase the security and resiliency of AP 6522 networks with an array of advanced security and network assurance features including Spectrum Analysis, Wireless IPS, Live RF, Advanced Forensics and AP Testing to proactively identify and mitigate network disruptions.

### 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

Access points 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.

## DEVICE AND NETWORK ACCELERATION

Device and network performance can be accelerated through a virtual LAN feature via the switch/controller. Each AP 6522 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.

## 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

### 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

### Mesh Networking

Extend wireless network coverage in a cost-effective way to enable a wide array of applications

# AP 6522 SPECIFICATIONS CHART

PHYSICAL CHARACTERISTICS	AP 6522 (INTERNAL ANTENNA)	AP 6522 (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-6522-66030-US & -WR	AP-6522-66040-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: 1,2,5,5.5,11,6,9,12,18,24,36,48, 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:	<b>Radio 1:</b> 2.4GHz: Chan 1-13 (2412-2472 MHz), Chan 14 (2484 MHz) Japan only <b>Radio 2:</b> 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)

**PRODUCT SPEC SHEET**

AP 6522

**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

For more information on how the AP 6522 can benefit your business, please visit us on the web at [www.motorolasolutions.com/wlan](http://www.motorolasolutions.com/wlan) or access our global contact directory at [www.motorolasolutions.com/enterprisemobility/contactus](http://www.motorolasolutions.com/enterprisemobility/contactus)

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