



# AP-5131 Access Point

Combination wired/wireless networking for branch offices and small businesses



## FEATURES

### WAN and LAN Ethernet ports

Single device solution for both wired and wireless networking

### Dual-radio, dual-band design; 802.11a/b/g in 2.4/5 GHz bands

Works with any standards-based IEEE WLAN

### Integrated router, firewall and DHCP server

Easy to scale, upgrade and maintain

### Adaptive AP mode

Can be controlled with a wireless switch to enable central management from the NOC, and in the event of loss of connectivity, resumes functionality as a standalone access point

### AAA server and hotspot gateway

Integrated services for authentication and public access management

### Mesh networking

Allows wireless extension of existing wired or wireless networks in remote or outdoor locations

## Cost-effective, secure, high-performance wired and wireless connectivity

Designed for small offices and retail locations, the AP-5131 delivers wired and wireless networking with enterprise-class performance and security in a single device. This easy-to-deploy solution offers the flexibility to connect securely to remote corporate private networks, the Internet and local network resources with the speed and reliability to support the most demanding applications, including real-time video and voice. The all-in-one AP-5131 delivers a new level of cost-efficiency and networking simplicity for employees in branch offices or telecommuters working at home. The 5131 boasts an integrated router, firewall, VPN, DHCP, AAA, hotspot gateway, and other services in one remotely manageable device, simplifying network set-up and management.

## Enterprise-class security and manageability

Support for today's standards-based security protocols ensures enterprise-level protection for users on wireless laptops and other mobile devices, as well as wired computers. A wide variety of administration features provide powerful and secure control by either local, non-technical staff or remote IT professionals in the Network Operations Center.

## Dual-radio 802.11a/b/g architecture

The dual-radio architecture offers the flexibility to best meet wireless LAN networking and security needs through either dual-band data services, or single-band data services and full-band rogue AP detection, which identifies and reports unauthorized entities on the network. A complete suite of dual and single-band antennas provides the versatility to customize radio coverage for even the most challenging environments, with a minimal number of access points.

## Adaptive AP

The AP-5131 supports an adaptive AP mode of operation for deployments at remote branch offices. This enables customers to deploy access points at remote sites and centrally manage them from a wireless switch located at the headquarters or NOC site. A Remote Site Survivability (RSS) feature allows the AP-5131 to continue uninterrupted wireless service even when the connection to the wireless switch is lost. All traffic between the adaptive access points and the wireless switch can be secured using an IPSec tunnel.

## Mesh networking

To enable the extension of wireless network coverage to areas where ethernet or fiber cabling is cost-prohibitive or otherwise impractical, the AP-5131 can operate wirelessly, connecting to other access points for data backhaul, in a mesh topology. Enabling an array of applications, from simple point-to-point bridges connecting two wired networks, to complex multi-node, multi-link networks, this feature offers a cost-effective way to extend the network outdoors or in remote areas, 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 802.11a, providing enterprise-class 802.11b/g service.

## AirDefense Sensor

The AP-5131 integrates AirDefense sensor firmware allowing customers to deploy AP-5131's with one radio configured for WLAN coverage and the second radio configured as an AirDefense sensor for 24x7 compliance monitoring, rogue detection and termination, and troubleshooting. Dedicating a radio for AirDefense sensor functionality gives the highest level of security compared to other IPS solutions

## SPECIFICATION SHEET

AP-5131

Combination wired/wireless networking for branch offices and small businesses

### End-to-end enterprise class wired and wireless security

802.11i, WPA2 and WPA; triple-DES IPsec encryption; VPN client, IP Filtering

### Wi-Fi Multimedia (WMM™) Quality of Service (QoS) and Voice prioritization

Superior performance for demanding mission critical applications, including voice and video

### Java™ web-based graphical user interface; Motorola Mobility Services Platform (MSP); SNMPv3; command line interface (CLI)

Flexible management options; easy-to-use "anytime, anywhere" management

that share the same radio for WLAN coverage and IPS on a time sliced basis. The integrated AirDefense sensor also eliminates the need for dedicated sensor hardware and associated cabling thereby reducing the overall deployment cost.

For more information on the AP-5131, please visit us on the web at [www.motorola.com/AP5131](http://www.motorola.com/AP5131) or access our global contact directory at [www.motorola.com/enterprise/contactus](http://www.motorola.com/enterprise/contactus)

# AP-5131 Specifications

## Physical Characteristics

Dimensions:	5.32 in. L x 9.45 in. W x 1.77 in. H 135 mm L x 240 mm W x 45 mm H
Weight:	1.95 lbs/0.884kg
Housing:	Metal, plenum-rated housing (UL2043)
Available Mounting Configurations:	No additional hardware required to mount on desktop, above drop ceiling, under ceiling or on wall
LEDs:	4 top mounted LEDs, 2 bottom mounted LEDs, with multiple modes indicating 802.11a/802.11g activity, power, adoption and errors
Uplink:	2 ports (WAN, LAN) Auto-sensing 10/100Base-T Ethernet

## User Environment

Operating Temperature:	-4°F – 122°F/-20°C to 50°C
Storage Temperature:	-40°F to 158°F/-40°C to 70°C
Operating Humidity:	5 to 95% RH non-condensing
Operating Altitude:	8000 ft./2438m @ 82°F/28°C
Storage Altitude:	15000 ft./4572m @ 53°F/12°C
Electrostatic Discharge:	15kV air, 8kV contact

## Power Specifications

Operating Voltage:	48V DC
Operating Current:	200mA
Integrated PoE Support:	802.3af on LAN Port

## Radio Specifications

Wireless Medium:	Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM)	
Network Standards:	802.11a, 802.11b, 802.11g, 802.3	
Data Rates Supported:	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps	
Operating Channels:	Chan 36 – 165 (5180 - 5825MHz) Chan 1-13 (2412-2472 MHz) Chan 14 (2484 MHz) Japan only Actual operating frequencies depend on regulatory rules and certification agency	
Available Transmit Power Settings:	4-20 dBm	
Operating Bands:	<b>FCC</b>	<b>EU</b>
	2.400 - 2.4835 GHz	2.400 - 2.4835 GHz
	5.150 - 5.250 GHz	5.150 - 5.250 GHz
	5.725 - 5.850 GHz	

## Operating Bands (continued):

Receiver Sensitivity:	Japan	6 Mbps	-91
	2.400 to 2.484 GHz	9 Mbps	-89
	5.150 to 5.250 GHz	12 Mbps	-87
	5.250 to 5.350 GHz	18 Mbps	-83
		24 Mbps	-81
		36 Mbps	-78
		48 Mbps	-74
		54 Mbps	-73
	<b>Radio .11g (dBm)</b>	6 Mbps	-89
	<b>10% PER for 1000 bytes</b>	9 Mbps	-88
	<i>IEEE 802.11a sect</i>	12 Mbps	-85
	<i>17.3.10.1 (MIN) &amp;</i>	18 Mbps	-82
	<i>17.3.10.4 (MAX)</i>	24 Mbps	-80
		36 Mbps	-77
		48 Mbps	-72
		54 Mbps	-70
	<b>Radio .11b (dBm)</b>	1 Mbps	-94
	<b>8% PER for 1,024 Octets</b>	2 Mbps	-90
	<i>IEEE 802.11g sect</i>	5.5 Mbps	-88
	<i>19.5.1 (MIN) &amp;</i>		
	<i>19.5.3 (MAX)</i>		
		11 Mbps	-84

## Regulatory

Standards Compliance:	Wi-Fi: 802.11a/b/g, WPA2, WMM
Product Safety Certs.:	UL / cUL 60950-1, IEC / EN60950-1, UL2043, TUV GS, RoHS
Radio Approvals:	FCC (USA), Industry Canada, CE (Europe), TELEC (Japan)

Part Numbers	Single Radio 802.11a/g	Dual Radio 802.11a+g	Dual Band antenna	PoE supply
AP-5131-40020-WW	•			
AP-5131-40021-WWR	•			•
AP-5131-40022-WW	•		• (x2)	
AP-5131-40023-WWR	•		• (x2)	•
AP-5131-13040-WW		•		
AP-5131-13041-WWR		•		•
AP-5131-13042-WW		•	• (x4)	
AP-5131-13043-WWR		•	• (x4)	•
AP-5131-40020-D-WR (Switch Required)	•			
AP-5131-13040-D-WR (Switch Required)		•		



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