

Data Sheet

Meru AP150 Access Point

Easiest-to-deploy, centrally managed access point for Enterprise-class Wi-Fi connectivity



AP150

Key Product Benefits:

- Easiest to deploy, enterprise-class AP eliminates RF channel planning, significantly reducing costs
- Multi-layered security options allow multiple applications and user groups
- Centralized management helps lower operational expenses
- Dual radios enable simultaneous support of 802.11a and 802.11b/g clients

Dual-radio, Tri-mode Access Point for Small-to-Medium Enterprise Networks

The Meru AP150 Access Point delivers secure, high-performance Wi-Fi connectivity for small to medium enterprise deployments such as remote offices, branch offices, retail locations, and K-12 campuses. The AP150 is a part of the Meru Wireless LAN (WLAN) System, which consists of coordinated Meru APs at the edge and centralized Meru controllers for management, security, and coordination for over-the-air reliability and Quality of Service (QoS). The Meru AP150 also comes standard with best-in-class security, basic Voice over WLAN (VoWLAN) support, and reliability essential for Enterprise-class Wi-Fi connectivity.

For customers planning new installations or adding capacity and coverage to existing WLANs, the AP150 is the easiest-to-deploy AP in its class. As with the Meru AP200 Access Point, the AP150 is a plug-and-play device that needs no configuration and no complex RF channel planning. Centralized configuration with Meru controllers and RF coordination provided by Meru Air Traffic Control™ technology eliminates these costly installation steps.

Zero-Configuration Design Streamlines Installation and Reduces Costs

Installing a new wireless edge device in the ceiling can be expensive due to the high labor costs associated with configuring the network and access points. The AP150 along with the centralized Meru WLAN architecture is designed to solve this problem. Because the AP150 requires zero configuration, installation is a simple plug-and-play procedure, which greatly reduces time and costs. Additional Meru AP 150 configuration benefits include:

- Automatic AP discovery and configuration
- No channel planning required with single channel installations
- Intelligent load balancing of clients
- No need to extend VLAN trunks to the edge—done centrally at the controller in the distribution layer or core layer
- IEEE 802.3af PoE (Power over Ethernet) support to leverage existing infrastructure to power edge devices

Multi-Layered Security Approach Offers Greater Network Protection

To help deliver greater security for the WLAN, Meru APs go beyond the basic over-the-air protections by providing multi-layered security policies.

- Local and RADIUS MAC Filtering
- WPA2, WPA, 802.1x, and WEP

- No security information contained within the AP
- Operates only with Meru controllers
- Multiple static or automatic security zones with individual security policies help ensure separation of different user groups or dynamic VLAN assignments per user based on RADIUS credentials—includes guest access security zone
- Can double as an RF scanner to be used with Wireless Intrusion Detection & Prevention (W-IPS) systems

Centralized RF Management Lowers Operational Costs

Post-installation maintenance and help-desk costs are some of the challenges for IT organizations. Meru reduces management complexity with its E(z)RF™ Application Suite. Meru E(z)RF is a centralized management tool that enables network administrators to remotely manage Meru APs and controllers.

- Centralized dashboard to monitor and troubleshoot the entire WLAN—including all AP150s
- Graphical view of performance and coverage parameters to better visualize the RF footprint of each AP150
- Central template-based configuration of all Meru controllers and AP150s

High-performance, Tri-mode Access Point Provides Investment Protection

As enterprise applications and user density continue to increase, and 802.11a/b/g clients are now commonplace in laptops, the Meru AP150 ensures that your network supports the full breadth of WLAN clients.

- Dual 802.11a and 802.11b/g radios
- Simultaneous support for 802.11a, 802.11b, and 802.11g clients
- Co-channel interference management for reliable WLAN access
- Basic VoWLAN QoS support for small density deployments of voice clients

Access Point Design Integrates Readily into Enterprise Deployments

Broad scale deployment of a WLAN requires APs to work with the existing environment. The AP150 along with the Meru WLAN System architecture are designed with the enterprise in mind.

- Layer 2 or 3 connectivity for flexible deployment options
- Locking mechanism to secure AP when mounted in public areas

About Meru Networks

Meru Networks is the global leader in wireless infrastructure solutions that enable the All-Wireless Enterprise. Its industry leading innovations deliver pervasive, wireless service fidelity for business-critical applications to major Fortune 500 enterprises, universities, healthcare organizations and state, local and federal government agencies. Meru's award winning Air Traffic Control technology brings the benefits of the cellular world to the wireless LAN environment. The Meru Wireless LAN System is the only solution on the market that delivers predictable bandwidth and over-the-air Quality of Service with the reliability, scalability, and security necessary for converged voice and data services over a single WLAN infrastructure.



AP150

Technical Specifications

For more information about the Meru AP150, visit:
www.merunetworks.com

Or email your questions to:
info@merunetworks.com

SECURITY	
MAC Filtering	Local MAC database; RADIUS MAC authentication
Layer 2 Security	802.11 Security: WEP-64, WEP-128, 802.1x with PEAP, WPA, WPA2 Dynamic VLAN assignment on a per-client basis
Encryption	WEP keys of 40 bits, 64 bits, and 128 bits (in hardware) TKIP (in hardware) AES (in hardware)
Radius Interoperability	Microsoft IAS, Steel-Belted Radius, FreeRADIUS, Cisco ACS
Layer 3 Security	VPN Passthrough Captive Portal for guest access
Intrusion Prevention System	Can be operated as a RF scanner Works in conjunction with Meru IPS features

MANAGEMENT	
Administrative Access	SSH, Telnet, GUI – through controller
Configuration	Automatically downloaded from Controller Can be modified through Controller GUI/CLI or E(z)RF Management Station
Troubleshooting and Local Access	Advanced troubleshooting through controller Historical reports and alerts through E(z)RF
Remote/Central Management	E(z)RF Management Station for: Monitoring, Alerts, Reports, RF Visualization, RF Locationing
SNMP Support	SNMP v1/v2c Agent & Monitoring through controller MIBs
Remote Logging	Syslog v1 and v2—failure alerts and change notifications through controller and E(z)RF
Software Upgrade	Automatic with new controller releases

WIRELESS SPECIFICATIONS	
Wireless Interfaces	Two radios—IEEE 802.11a and IEEE 802.11b/g
Power Management	Optimal power control in 1 dBm increments
Antenna	RP F SMA jacks on housing for external antennas for specific coverage requirements, or 2.2 dBi omnidirectional dipoles included
Wireless Medium Access	Wi-Fi Compliant 802.11 MAC standard
Frame Size	Peak frame size of <2250 bytes Fragmentation and Reassembly of 802.11/Ethernet frames supported
Client Support	All Wi-Fi compatible clients Power Save clients Clients that perform active and passive scanning

802.11a	
Frequency Band	5.180 – 5.240 GHz; 8 channels (34, 36, 38, 40, 42, 44, 46, 48) 5.280 – 5.320 GHz; 4 channels (52, 56, 60, and 64) NOTE: FCC certification methods still pending, these channels may not be legally available in US at FCC 5.745 – 5.825 GHz; 5 channels (149, 153, 157, 161, and 165)
Operating Channels	Configurable based on country regulations
Data Rates	54, 48, 36, 24, 18, 12, 9 and 6 Mbps with automatic rate adaptation
Transmit Power	~ +16 dBm (40 mW) nominal; transmit power, indoor/outdoor usage, antenna type and gain are country regulations dependent
Receive Sensitivity	70 dBm at 54 Mbps, -86 dBm at 6 Mbps

802.11b/g	
Frequency Band	Hardware supports 2.40-2.50 GHz: 2.4 GHz - 2.4835 GHz (US, Europe) 2.4 GHz - 2.497 GHz (Japan only)
Operating Channels	1-11 US/Canada, 1-13 Europe, and 1-14 (Japan) 3 non-overlapping channels
Transmit Power	~+20 dBm (100 mW) nominal, country regulations dependent
802.11b Data Rates	11, 5.5, 2 and 1 Mbps with automatic rate adaptation
802.11g Data Rates	54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps
802.11b Receiver Sensitivity	-85 dBm at 11 Mbps, -93 dBm at 1 Mbps with BER 10E-5
802.11g Receiver Sensitivity	-73 dBm at 54 Mbps, -85 dBm at 6 Mbps

NETWORK SPECIFICATIONS	
Forwarding	IP Tunnel to Controller in Coordinated Mode 802.3/802.11 bridging in Bridge Mode
Network Interfaces	1 Auto-sensing 10/100 Base-TX Ethernet (RJ-45)
Addressing	DHCP or Manual Assignment
VLAN	802.1Q Tagging Support through controller

PHYSICAL SPECIFICATIONS	
Dimensions	9.25" (W) X 5.50" (L) X 1.25" (H)
Weight	15.2 oz (0.95 lbs) / 431 grams
Power Type	Power over Ethernet, IEEE 802.3af compliant
Maximum Power Draw	10W
Environmental	Indoor Operating Temperature: 32°F to 131°F (0°C to 55°C) Indoor Operating Humidity: 0% to 95% humidity (non-condensing) Indoor Storage and Transit Temperature: -14°F to 158°F (-10°C to 70°C) Indoor Storage and Transit Humidity: 0% to 95% relative humidity (non-condensing)
Indicators	4 LEDs for monitoring power, Ethernet activity, 802.11a activity, and 802.11b/g activity
Warranty	Hardware: 1 year Software: 90 days Red Carpet Service Options



Meru Networks
 Corporate Headquarters
 894 Ross Drive
 Sunnyvale, CA 94089 USA
 P 408.215.5300
 F 408.215.5301

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