MERU NETWORKS
voice. Data. wireless. *Become one.*

wireless Data voice *Become one.*

Data Sheet

AP150

A part of Meru's 4th generation WLAN architecture that consists of coordinated access points at the edge and centralized Meru Controllers for management, security and coordination for Quality of Service - the new AP150 is a lower cost option than Meru's AP200 series of access points. The AP150 breaks the price-performance barriers with two 802.11 radios for simultaneous 802.11a & 802.11b/g WLAN access and is an ideal option for enterprise-wide data-only WLAN implementations and small-sized converged data & voice WLAN implementations. The AP150 works in conjunction with Meru's Controller products and can be easily integrated into existing Layer 2 & Layer 3 wired network environments to provide enterprise-grade Wi-Fi access with multi-layered security options, basic VoWLAN support, centralized configuration, troubleshooting tools, remote management and RF visualization capabilities.

Dual-Radio, Tri-mode Access Point

Low-cost access point for enterprise-class Wi-Fi 802.11a/b/g connectivity

High Performance Tri-mode Access Point Provides Investment Protection

Enterprise applications and user density continue to increase. Tri-mode 802.11a/b/g clients are now commonplace in laptops. Ensure your network supports the full breadth of wireless LAN clients with a Meru access point.

- Dual 802.11b/g and 802.11a radios
- Simultaneously support 802.11b, 802.11g and 802.11a clients
- Contention Management for high density of data clients
- Basic VoWLAN QoS support for small for small density of voice clients.

Multi-Layered Security Approach Protects The Network and Data

Security is the key consideration for network administrators planning a wireless LAN. Meru goes beyond the basic over-the-air protections with a multi-layered security policy.

- Wi-Fi Alliance Certified™ for WPA2, WPA, 802.1x and WEP
- No security information within access point
- Only operates with Meru Controller
- Multiple ESSIDs with individual security policies to ensure separation of different user groups or dynamic VLAN assignment per user based on Radius credentials
- Interoperable with 3rd party Wireless Intrusion Detection & Protection (WIDS/WIPS) solutions

Zero-Configuration Design Reduces Installation Costs

Installing a new wireless edge in the ceiling can be expensive due to high labor costs associated with configuring the network and the access points. Meru's AP150 along with the centralized WLAN architecture is designed to solve this problem. With zero-configuration required the access point; the installation procedure is a simple plug-n-play.

- Automatic AP discovery, configuration
- Automatic Channel Selection
- 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.

Centralized RF Management Reduces Operational Costs

Post-installation maintenance and help-desk costs are a matter of worry for IT organizations. The AP150 and Meru controllers can be remotely managed through Meru's central management station – E(z)RF.

- Centralized dashboard to monitor and troubleshoot the entire WLAN – including all AP150s
- Visualize the RF footprint of each AP150 with a graphical view of performance and coverage parameters.
- Central template-based configuration of all Meru controllers and AP150s

Ready for Enterprise Deployments

Broad scale deployment of a wireless LAN requires the access point to work with the existing environment. Meru's AP150 along and the wireless LAN System architecture are designed with the enterprise in mind.

- Layer 2 or 3 connectivity for flexible deployment options
- Plenum rated for installation above ceiling
- Locking mechanism secures access point when mounted in public areas

AP 150

Technical Specifications

About Meru Networks

Meru Networks is a global leader in Wireless Voice over IP (VoIP) infrastructure solutions. With its innovative, award-winning Air Traffic Control technology that brings the benefits of the cellular world to the wireless LAN environment, Meru's WLAN System is the only solution on the market that offers the reliability, scalability, and security necessary to deliver converged voice and data services over a single WLAN infrastructure.

SECURITY	
Layer 2 Security	802.11 Security: WEP-64, WEP-128, 802.1x w/ PEAP, WPA, WPA2
	Dynamic VLAN assignment on a per-client basis
Encryption	WEP64 & WEP128 (in hardware)
	TKIP (in hardware)
	AES (in hardware)
Radius Interoperability	Microsoft IAS; FreeRadius
Layer 3 Security	VPN Passthrough
	Captive Portal – with controller

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 Location
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	2 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 omni-directional 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 FCS
	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 2.4 GHz - 2.497 GHz Japan only 802.11b/g for rogues
Operating Channels	1-11 US/Canada, 1-13 Europe, and 1-14 (Japan)
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
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

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