Data Sheet

MERU NETWORKS

Meru MC5000 Series
Scalable, Reliable System for Large Converged Voice and Data Wireless Networks
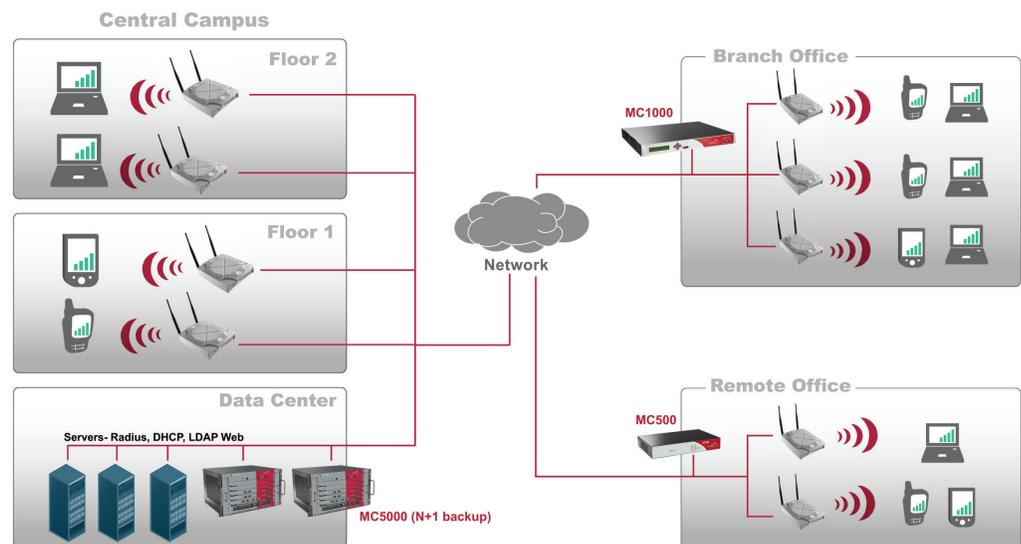
MC5000

Key Product Benefits:

- Unique multi-layer security approach with automatic detection and prevention of rogue APs

- Intelligent contention management for the highest possible wireless client density

- QoS for traffic prioritization both upstream and down, assuring toll quality voice

- Auto discovery and configuration of APs without time intensive manual tuning

- Automatic load balancing of clients for consistent, reliable throughput

- Certified by the WiFi Alliance

The Meru MC5000 Series Controller provides a flexible and dynamically scalable solution with unprecedented reliability for large enterprises and branch offices. This fully extendible, modular hardware system allows network administrators to securely manage and easily control their wireless network while meeting mission critical enterprise demands. As part of the Meru Networks controller family, the MC5000 provides centralized configuration and management for ease of deployment, multilayer security, N+1 redundancy, and scalability while eliminating co-channel interference and the need for channel planning. Additionally, the MC5000 is E(z)RF™ Application Suite compliant and easily integrates with existing infrastructure.

Product Overview:

- With support for IEEE security standards, WiFi Alliance Certification and Meru's unique multi-layer security approach, security policies follow users as they roam without re-authentication. Additionally, rogue Access Points (APs) are automatically detected and prevented without performance degradation.

- Air Traffic Control technology provides:
    - Intelligent contention management allowing the WLAN to effectively meet growing bandwidth demands and support the highest possible wireless client density

    - Quality of Service (QoS) for traffic prioritization both upstream and down to guarantee access for latency-sensitive applications, assuring toll quality voice over Wireless LANs

- Optional Three Tier Traffic Distribution system (3TDS™) enables maximum throughput scalability with protection of investments in wired switch infrastructure

- Auto discovery and configuration of APs selects best power and channel settings without time intensive manual tuning.

- Centralized intelligence automatically load balances clients for consistently reliable throughput.

Large Scale Enterprise Deployment

Central Campus

Floor 2

Floor 1

Data Center

Servers- Radius, DHCP, LDAP Web

MC5000 (N+1 backup)

Network

Branch Office

MC1000

Remote Office

MC500

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. 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.

MC5000
Technical Specifications

APPLICATION SUPPORT AND OVER-THE-AIR QoS

SIP and H.323 support	Support for SIP and H.323v1 applications and codecs
QoS Rules	Configurable dynamic QoS rules
	Over-the-air upstream and downstream resource reservation
	Automatic, stateful flow detectors for SIP, H.323, Cisco SCCP, SpectraLink SVP and Vocera
	User-configurable static and dynamic QoS rules per application (user-defined) and per user (stations, users, and port numbers)
	Call Admissions control and Call Load Balancing

SECURITY

Authentication	Combination of captive portal, 802.1x and open authentication
	802.1X with EAP-Transport Layer Security (EAP-TLS), Tunneled TLS (EAP-TTLS), Protected EAP (PEAP) MS-CHAPv2, Smartcard/Certificate, Lightweight EAP (LEAP), EAP-FAST and EAP-MD5, with mutual authentication and dynamic, per user, per session unicast and broadcast keys
	Secure HTTPS w/customizable Captive Portal utilizing RADIUS
Encryption support	Static and dynamic 40-bit and 128-bit WEP keys, TKIP with MIC, AES
Security Policy	Radius Assisted, Per User and Per ESSID Access control via MAC Filtering
	Multiple ESSID/BSSID each with flexibility of separate and shared Security Policy
Dual Radios	Centralized, continuous Rogue AP detection and suppression/permit for 802.11a and 802.11b/g
Security Firewall	10,000 simultaneous sessions
	System configured or Per user Radius configured firewall policy

MOBILITY

Zero-loss Handoffs	Infrastructure-controlled zero-loss handoff mechanism for standard Wi-Fi clients
Multi-vendor	Interoperates with non-Meru AP's for hand offs
High Availability	N+1 configuration for automatic fail-over and recovery
	No performance degradation with increased Wi-Fi clients
	Virtual cell provides load balancing coordination for improved performance and WLAN resiliency upon AP failure

WIRED/WIRELESS SUPPORT

Automatic discovery of Access Discovery	AP201 and AP208
	AP150
	RS4K Radio Switch
Wireless compliance	802.11a, 802.11b, 802.11g
Wired/Switching	IEEE 802.1Q VLAN tagging, GRE Tunneling and IEEE 802.1D Spanning Tree Protocol

CENTRALIZED MANAGEMENT

Zero-Configuration	Automatically selects power and channel settings
System management	Centralized and remote management and software upgrades via System Director web-based GUI, SNMP, Cisco-like Command-Line Interface (CLI) via serial port, SSH, Telnet, centrally managed via EzRF Network Manager
	Centralized Security Policy for WLAN, Multiple ESSIDs and VLANs with their own administrative/security policies
Intelligent RF Management	Coordination of access points with load-balancing for predictable performance
	Centralized auto-discovery, auto-channel configuration, and auto-power selection for access points
	Co-channel interference management

PRODUCT SPECIFICATIONS

Environmental Operating	Temperature: 0 to 40C / 32 to 104F
	Humidity (RNC): <95% @ 40C / 104F
Storage and Transit	Temperature: -40 to 85C / -40 to 185F
	Humidity (RNC): <95% @ 40C / 104F
Compliance	EMC: FCC Part 15/ICES-003 Class A; Japan VCCI Class A; EU EN 55022 and EN 55024
	Safety: cUL 60950-1; IEC/EN 60950-1; CB scheme and report with current national deviations per country certification
Standard Warranty	Hardware: 1 year
	Software: 90 days

Application Large Scale Enterprise

Performance	Up to 1000 Access Points
	Up to 5 Gig of Unencrypted Throughput
Interfaces Ethernet	4 10/100/1000Base-T or 2 1000 Base-X SFP
Serial Port	Yes (RJ-45)
Intelligent Platform Management	Intelligent platform supervisory module for added system reliability
Indicators Power – On/Off	Yes
Status	Yes
Ethernet Ports	LED Link/Activity/Speed
Shelf Management Alarms	Health status for each blade within the system
Power Consumption Per Blade	200W
Per Chassis	1200W
Dimensions H x W x D	10.5 in. x 19 in. x 15 in
Mounting	6U rack mount

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