

# Data Sheet

## Meru MC5000 Series Controller

### Scalable, Reliable System for Large Converged Voice and Data Wireless Networks



MC5000

#### Key Product Benefits:

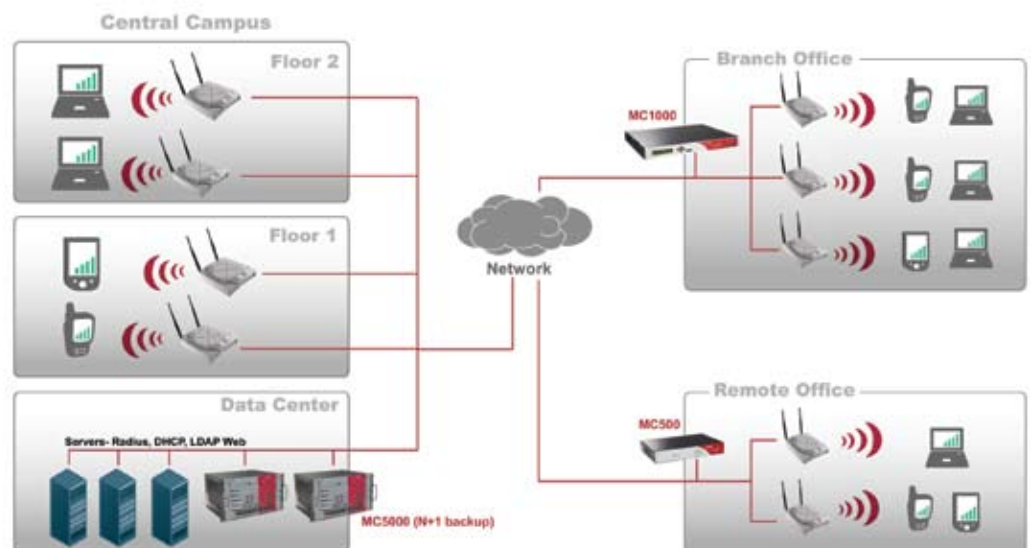
- Unique multi-layer security approach with automatic detection and prevention of rogue APs
- Intelligent contention management for the highest possible wireless client density
- QoS for traffic prioritization both upstream and down, assuring toll quality voice
- Auto discovery and configuration of APs without time intensive manual tuning
- Automatic load balancing of clients for consistent, reliable throughput
- 802.3ad link aggregation support with acceleration module offers the flexible choices for high throughput and reliability

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 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
- 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



## About Meru Networks

Meru Networks develops and markets 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 local, state and federal government agencies. Meru's award-winning Air Traffic Control technology brings the benefits of the cellular world to the wireless LAN environment, and its WLAN 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 to deliver converged voice and data services over a single WLAN infrastructure.



# MC5000

## Technical Specifications

For more information about the Meru MC5000, visit: [www.merunetworks.com](http://www.merunetworks.com)

Or email your questions to: [info@merunetworks.com](mailto:info@merunetworks.com)

### 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 Admission 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 64-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 APs for handoffs
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 Point	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 802.3ad Link aggregation

### 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 APs with load-balancing for predictable performance Centralized auto-discovery, auto-channel configuration, and auto-power selection for APs Co-channel interference management

### PRODUCT SPECIFICATIONS

Environmental Operating	0° to 40°C / 32° to 104°F
Temperature	Humidity (RNC): <95% @ 40°C / 104°F
Storage and Transit	Temperature: -40° to 85°C / -40° to 185°F Humidity (RNC): <95% @ 40°C / 104°F
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 1500 APs Up to 20 Gbps of Encrypted and Unencrypted Throughput
Interfaces	Ethernet: 4 10/100/1000Base-T or 2 1000 Base-X SFP Serial Port: (RJ-45)
Indicators	Power – On/Off Status Ethernet Ports: LED Link/Activity/Speed Shelf Management Alarms for health status for each blade within the system
Power Consumption	Per Blade: 200W Per Chassis: 1200W
Dimensions (H x W x D)	10.5" x 19" x 15"
Mounting	6U rack mount



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

Copyright © 2009 Meru Networks, Inc. All rights reserved. No part of this document may be reproduced by any means nor translated to any electronic medium without the written consent of Meru Networks, Inc. Specifications are subject to change without notice. Information contained in this document is believed to be accurate and reliable, however, Meru Networks, Inc. assumes no responsibility for its use. Meru Networks, Meru, Air Traffic Control, Airtime Fairness, E(z)RF, Airfirewall, Wireless Without Compromise, and Virtual Cell are trademarks of Meru Networks, Inc. All other trademarks mentioned in this document are the property of their respective owners.