

Data Sheet

Meru MC4100 Controller Scalable, Intelligent System for Large Converged Voice and Data Wireless Networks



MC4100

Key Product Benefits:

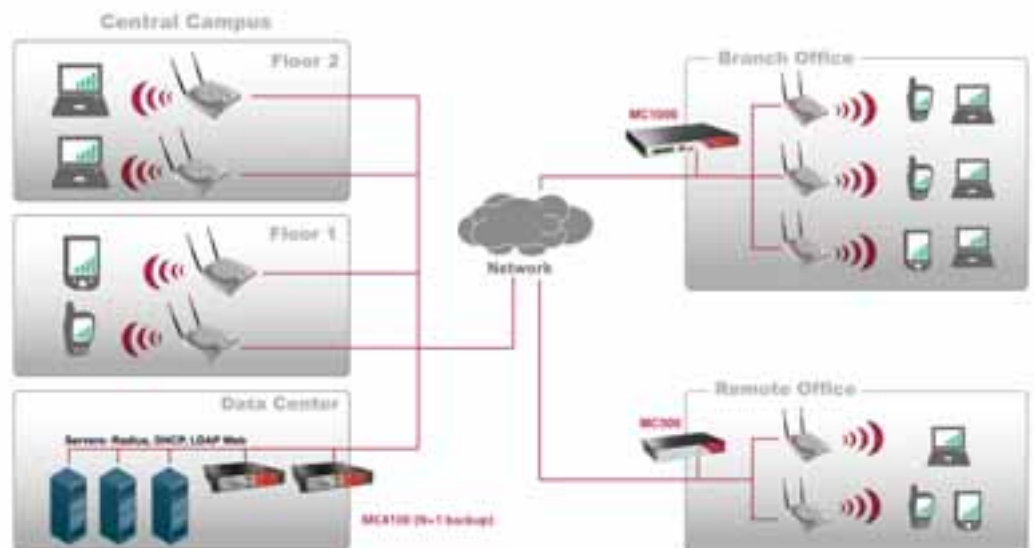
- Unique multi-layer security with automatic detection and prevention of rogue APs
- Intelligent contention management for the highest possible wireless client density
- QoS for traffic prioritization both upstream and downstream, assuring toll quality voice
- Auto discovery and configuration of APs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

The Meru MC4100 Series Controller provides a scalable solution for medium and large enterprise deployments. The MC4100 controller 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 MC4100 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, with Air Traffic Control™ technology MC4100 supports toll quality voice over WLAN. For larger network deployments with multiple controllers, MC4100 is E(z)RF™ Wireless Management 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 degradation of performance.
- Ease of deployment with support for Virtual Cell™ and single channel implementations making it easier to install and upgrade networks without requiring extensive site survey and complex channel planning.
- Air Traffic Control technology provides:
 - oIntelligent contention management allowing the WLAN to effectively meet growing bandwidth demands and support the highest possible wireless client density.
 - oQuality of Service (QoS) for traffic prioritization of both upstream and downstream 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. Founded in 2002, Meru is based in Sunnyvale, Calif. For more information, visit www.merunetworks.com or call (408) 215-5300.



MC4100

Technical Specifications

For more information about the Meru MC4100, visit: www.merunetworks.com

Or email your questions to: 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 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 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 Discovery	AP300 Series, AP200 Series, AP150, OAP180, RS4000
Wireless compliance	802.11a, 802.11b, 802.11g, 802.11n Draft 2.0
Wired/Switching	IEEE 802.1Q VLAN tagging, GRE Tunneling and IEEE 802.1D Spanning Tree Protocol, 802.3ad

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 management suite 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: 2006 and EN 55024: 1998/A1: 2001/A2: 2003; Korea MIC 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 Performance	Medium and Large Scale Enterprise Up to 300 APs Up to 3000 Users Up to 4 Gig of Encrypted Throughput
Interfaces	Ethernet: 4 10/100/1000Base-T, 2 10/100/1000Base-T (reserved for future use) Serial Port: (DB-9)
Indicators	Power – On/Off Status Ethernet Ports: LED Link/Activity/Speed
Power Consumption	300W Dual Redundant Power Supplies
Dimensions (H x W x D)	3.5" x 17" x 22"
Weight	36 lbs (with out packaging); 42 lbs (with packaging)
Mounting	2U rack mount



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