

MC4200

Wireless LAN Controller

End-to-end control over the wireless LAN for your large enterprise

The MC4200 hardware controller optimizes wireless traffic across all access points and client devices to provide superior performance, reliability, and predictability in your wireless LAN. Powered by the System Director operating system, it allows you to easily control your wireless network while meeting mission-critical enterprise demands for wireless connectivity. It intelligently manages each device's connection, pooling and allocating network resources to flawlessly support a broad range of applications – including high-bandwidth applications like voice and video. The optional MC4200 10GbE Module supports your existing 10GbE infrastructure without the need to move to a larger, chassis-based controller system. The MC4200 supports the Service Assurance Application Suite to extend control and visibility over your Meru wireless LAN. It can be deployed as a physical hardware appliance or as a virtual appliance operating in a VMware environment.

Features

- Powered by System Director operating system to govern all traffic on the wireless LAN
- Airtime Fairness® allocates equal time across devices to ensure that all traffic operates at its maximum speed
- Seamless integration with existing infrastructure, with support for diverse applications
- Single channel architecture with ability to layer additional channels in the same physical space
- Multilayered security: encryption, 802.1X authentication, firewall, rogue detection/ suppression, and wireless IPS/IDS
- Optional MC4200 10GbE Module

Benefits

- Controls and optimizes wireless traffic across access points and client devices
- Simultaneously supports multiple high-bandwidth, resource-intensive applications, including voice and video
- Delivers superior performance, scalability, and flexibility
- Eliminates co-channel interference and the need for channel planning while enabling easy capacity expansion
- Protects sensitive data and aids in compliance
- Supports existing 10GbE infrastructure without the need to migrate to a chassis-based system

APPLICATION:

- · Large enterprises
- Regional offices

CAPACITY:

500 access points

CONNECTIVITY:

4x1 Gigabit Ethernet, or Optional 2x10 Gigabit Ethernet Module

MC4200

TECHNICAL SPECIFICATIONS

APPLICATION SUPPORT AND OVER-THE-AIR QoS

SIP and H.323 support

Dynamic out-of-the-box support for SIP and H.323 applications and codecs

QoS

Configurable QoS rules for SIP, H.323, Ascom, Avaya, Microsoft, Polycom, Siemens, and ShoreTel

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 WMM support

WMM rate adaptation, optimized based on real-time network conditions

SECURITY

Authentication

Combination of captive portal, 802.1X, and open authentication Advanced security using WPA2

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 keus

Secure HTTPS with customizable captive portal utilizing RADIUS

Encryption Support

Static and dynamic 40-bit and 128-bit WEP keys, TKIP with MIC, AES, SSL, TLS

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

Rogue Detection and Suppression

All controllers have the intelligence to identify and classify rogue devices in 802.11n, 802.11a, and 802.11b/g

Security Firewall

Per-user firewall with fine-grained policy management: admission control, packet prioritization, QoS flows, packet drop policy, bandwidth scaling, filter ID, network protocol, and source port filtering System-configured or per-user, RADIUS-configured firewall policy

MOBILITY

Zero-Loss Handoffs

Infrastructure-controlled, zero-loss handoff mechanism for standard Wi-Fi clients

Virtual Cell Load Balancing

Virtual Cell provides load balancing coordination for improved performance and WLAN resiliency upon AP failure

CENTRALIZED MANAGEMENT

Zero Configuration

Automatically selects power and channel settings Access points automatically discover controllers and download configuration settings

Zero-touch, plug-and-play deployments

System Management

Centralized and remote management and software upgrades via System Director web-based GUI, SNMP, command-line interface [CLI] via serial port, SSH, Telnet, centrally managed via E[z]RF™ 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 APs

Co-channel interference management

WIRED/WIRELESS SUPPORT

Wireless Compliance

IEEE 802.11 a/b/g/n, IEEE 802.11i support (AES, WEP, WPA, WPA2), IEEE 802.11e, WMM

Automatic Discovery & Configuration

All Meru access points

Wired/Switching

IEEE 802.1Q VLAN tagging, GRE Tunneling, and IEEE 802.1D Spanning Tree Protocol

PHYSICAL SPECIFICATIONS

Dimensions

16.97" width x 1.74" height x 16.49" depth [43.1 cm width x 4.45 cm height x 41.88 cm depth]

Weight

25 lbs 6 oz

Power

Dual Hot Swappable 275W PSU

Environmental

Operating temperature: 0° to 40° C (32° F to 104° F) Operating humidity: 95% at 40° C [104° F) Storage temperature: -40° to 85° C [-40° F to 185° F] Storage humidity: 95% at 40° C [104° F]

Interfaces

4 10/100/1000 Base-T Ethernet
Optional 2x 10 Gigabit Ethernet
RJ45 console port
2 x USB port
Power on/off switch
Ethernet port status lights [LED] for link/activity/speed

Access Point and Client Support

500 APs and 5,000 Wi-Fi clients

Mounting

1U rack mount

Standard Warranty

1 year

Certifications

RoHS Compliant Wi-Fi Certified a/b/g/n



Safety Standards

UL 60950-1 IEC 60950-1

EM

FCC Part 15/ICES-003 Class A VCCI Class A – Japan EN 55022 Class A – Europe EN 55024 – Europe EN60601-1 – Europe EN60601-1-2 – Europe KCC – Korea

Part Numbers

MC4200 Wireless controller with zero access point licenses MC4200-125 Wireless controller with 125 AP licenses MC4200-SD-10G License to run 10GbE hardware option on an MC4200 MC4200-PEF Policy Enforcement Module for MC4200 controller MC4200RN-1-MAX Software module to upgrade N+1 slave wireless controller for N=1 MC4200RN-5-MAX Software module to upgrade N+1 slave wireless controller for N<=5 wireless wireless controller for N<=5 wireless wireless controller for N<=5 wireless wireless wireless controller for N<=5 wireless wireles

Other Controllers from Meru:

MC1500

Small-to-medium enterprises and remote offices 30 access points

MC3200

Medium enterprises and branch offices 200 access points

MC5000

Large enterprises, headquarters, large campuses 1,500 access points

Meru delivers an all-wireless network that fully supports the enterprise, delivering a consistent, interactive experience for all users. No matter what applications they are running. No matter how many other users are on the network.

