



Fortinet Wireless Controllers MC-Series



Fortinet Wireless Controllers

Fortinet MC1550, MC3200, MC4200 and VEs

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

Fortinet infrastructure wireless controllers deliver a secure access solution for highly mobile organizations. Deployment flexibility allows you to deliver fast WiFi to support a broad variety of applications. Powered by Fortinet's System Director operating system, infrastructure WiFi controllers optimize traffic across wireless access points and client devices to provide high performance and predictability while addressing enterprise demands for wireless connectivity.

These controllers for infrastructure WiFi manage authentication, encryption and virtual private network connections for the wireless network. Policy enforcement and wireless intrusion prevention software can be added.

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

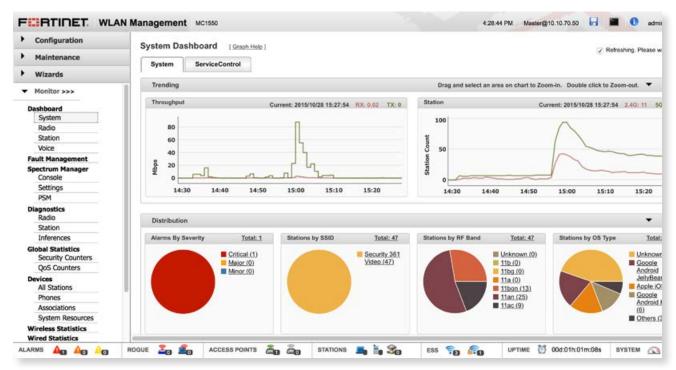
Benefits

- 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





FEATURES



Service Director 8.0 Dashboard

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 keys

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

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 WiFi 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 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/ac, IEEE 802.11i support (AES, WEP, WPA, WPA2), IEEE 802.11e, WMM

Automatic Discovery & Configuration

All Fortinet access points

Wired/Switching

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

2 www.fortinet.com

SPECIFICATIONS

	MC1550	MC3200	MC4200
General			
Application	Small enterprises, remote offices	Medium enterprises, branch offices	Large enterprises, regional offices
Hardware			
GE RJ45 Ports	2	4	4
1 GE / 10 GE SFP+ Slots	_	_	Optional 2-port module
Capacity			
Maximum Access Points	50	200	500
Maximum Clients	1,000	2,000	5,000
Dimensions			
Height x Width x Length (inches)	1.73 x 10.70 x 7.68	1.74 x 16.97 x 16.49	1.74 x 16.97 x 16.49
Height x Width x Length (cm)	4.4 x 27.2 x 19.5	4.45 x 43.1 x 41.88	4.45 x 43.1 x 41.88
Weight	4.4 lbs (2.0 kg)	22.4 lbs (10.2 kg)	25 lbs 6 oz (11.47 kg)
Form Factor	Desktop	1 RU	1 RU
Environment			
Power Supply	One 12V, 3.75A (45 W Max) AC/DC adapter included	Single 270 W PSU	Dual Hot Swappable 275 W PSU
Operating Temperature	32-104°F (0-40°C)	32-104°F (0-40°C)	32-104°F (0-40°C)
Storage Temperature	-4–158°F (-20–70°C)	-40-185°F (-40-85°C)	-40-185°F (-40-85°C)
Humidity	10-95% non-condensing	95% at 40°C (104°F)	95% at 40°C (104°F)
Compliance			
Safety	FCC Part 15B Class B, UL 60950-1, CSA C22.2 No. 60950-1-07, EN 60950-1, IEC 60950-1, ICES-003 Class B, EN55022 Class B, EN55024, VCCI Class B	FCC Part 15/ICES-003 Class A, VCCI Class A, EN 55022 Class A, EN 55024, EN60601-1, EN60601- 1-2, KCC, UL 60950-1, IEC 60950-1	FCC Part 15/ICES-003 Class A, VCCI Class A, EN 55022 Class A, EN 55024, EN60601-1, EN60601- 1-2, KCC, UL 60950-1, IEC 60950-1
Certifications			
	RoHS, REACH, WEEE	RoHS, CB Report, WiFi Certified a/b/g/n	RoHS, CB Report, WiFi Certified a/b/g/n
Warranty			
Standard Warranty	1 year	1 year	1 year

 $Note: Transceivers \ to \ be \ purchased \ separately. \ 850 \ nm \ multimode: Intel \ FTLX8571D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ FTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3BCV-IT \ or \ 1310 \ nm \ single \ mode: Intel \ TTLX1471D3$





MC1550





MC4200

VIRTUAL CONTROLLERS	MC1550-VE	MC3200-VE	MC4200-VE
Technical Specifications			
Hypervisor Support	ESXi v4.0, 4.1, 5.0, 5.1, 5.5, 6.0	ESXi v4.0, 4.1, 5.0, 5.1, 5.5, 6.0	ESXi v4.0, 4.1, 5.0, 5.1, 5.5, 6.0
Application	Small to mid-sized enterprises	Mid-size enterprises	Large enterprises
Scalability	Up to 50 access points and 1,000 clients	Up to 200 access points and 2,000 clients	Up to 500 access points and 5,000 clients
vCPUs	2	3	4
Memory	2 GB	2 GB	2 GB
vNICs	2	2	4
Disk Space	2 GB	2 GB	2 GB
Redundancy	N+1 for controller instances of the same model	N+1 for controller instances of the same model	N+1 for controller instances of the same model

ORDER INFORMATION

Product	SKU	Description		
MC1550	MC1550-0-xx	Wireless controller with zero access point licenses		
	MCx000-SD-XAP	License for "X" number of access points		
MC1550-VE	MC1550VE-RN5-MAX	Software Module to upgrade a N+1 Slave MC1550-VE controller for N=2 to N=5. The main controllers can be a MC1550 or MC1550-VE with SD 5.3.105 or later installed. Note: Does NOT include hardware, software-only license.		
	MC1550-VE-XX	Wireless Controller (NOT FOR U.S.). Platform can be upgraded to support up to 50 APs. MC1550-VE supersedes MC1500-VE. Additional licenses sold separately.		
	MC1550-VE-US	Wireless Controller (FOR U.S. ONLY). Platform can be upgraded to support up to 50 APs. MC1550-VE supersedes MC1500-VE. Additional licenses sold separately.		
MC3200	MC3200-xx	Wireless controller with zero access point licenses		
	MCx000-SD-XAP	License for "X" number of access points		
MC3200-VE	MC3200VE-RN5-MAX	Software Module to upgrade a N+1 Slave MC3200-VE controller for N=2 to N=5. The main controllers can be a MC1550, MC1550-VE, MC3200 or MC3200-VE with SD 5.3.105 or later installed. Note: Does NOT include hardware, software-only license.		
	MC3200-VE-XX	Wireless Controller International (NOT FOR U.S.). Platform can be upgraded to support up to 200 APs. Includes System Director software (5.0 or higher) with Air Traffic Control. Supports N+1 Wireless Controller Redundancy. Additional licenses sold separately.		
	MC3200-VE-US	Wireless Controller (FOR U.S. ONLY). Platform can be upgraded to support up to 200 APs. Includes System Director software (5.0 or higher) with Air Traffic Control. Supports N+1 Wireless Controller Redundancy. Additional licenses sold separately.		
MC4200	MC4200-xx	Wireless controller with zero access point licenses		
	MCx000-SD-XAP	License for "X" number of access points		
	MC4200-SD-10G	License to run 10GE hardware option on an MC4200		
MC4200-VE	MC4200VE-RN5-MAX	Software Module to upgrade a N+1 Slave MC4200-VE controller for N=2 to N=5. The main controllers can be a MC1550, MC1550-VE, MC3200, MC3200-VE, MC4200 or MC4200-VE with SD 5.3.105 or later installed. Note: Does NOT include hardware, software-only license.		
	MC4200-VE-XX	Wireless Controller International (NOT FOR U.S.) Platform can be upgraded to support up to 500 APs. Includes System Director software (5.0 or higher) with Air Traffic Control. Supports N+1 Wireless Controller Redundancy. Additional licenses sold separately.		
	MC4200-VE-US	Wireless Controller (FOR U.S. ONLY). Platform can be upgraded to support up to 500 APs. Includes System Director software (5.0 or higher) with Air Traffic Control. Supports N+1 Wireless Controller Redundancy. Additional licenses sold separately.		
MCx000-VE Licenses	MCX000-VE-500AP	MC4200-VE Virtual Appliance 500 AP Software Upgrade License.		
	MCX000-VE-300AP	MC4200-VE Virtual Appliance 300 AP Software Upgrade License.		
	MCX000-VE-250AP	MC4200-VE Virtual Appliance 250 AP Software Upgrade License.		
	MCX000-VE-200AP	MC3200-VE/MC4200-VE Virtual Appliance 200 AP Software Upgrade License.		
	MCX000-VE-100AP	MC3200-VE/MC4200-VE Virtual Appliance 100 AP Software Upgrade License.		
	MCX000-VE-50AP	MC1550-VE/MC3200-VE/MC4200-VE Virtual Appliance 50 AP Software Upgrade License.		
	MCX000-VE-40AP	MC1550-VE/MC3200-VE/MC4200-VE Virtual Appliance 40 AP Software Upgrade License.		
	MCX000-VE-30AP	MC1550-VE/MC3200-VE/MC4200-VE Virtual Appliance 30 AP Software Upgrade License.		
	MCX000-VE-25AP	MC1550-VE/MC3200-VE/MC4200-VE Virtual Appliance 25 AP Software Upgrade License.		
	MCX000-VE-20AP	MC1550-VE/MC3200-VE/MC4200-VE Virtual Appliance 20 AP Software Upgrade License.		
	MCX000-VE-10AP	MC1550-VE/MC3200-VE/MC4200-VE Virtual Appliance 10 AP Software Upgrade License.		
	MCX000-VE-5AP	MC1550-VE/MC3200-VE/MC4200-VE Virtual Appliance 5 AP Software Upgrade License.		
	MCX000-VE-1AP	MC1550-VE/MC3200-VE/MC4200-VE Virtual Appliance 1 AP Software Upgrade License.		

Please note the range of Fortinet infrastructure access points are supported by a combination of specific controller firmware and hardware and are not designed to function with third-party controllers. Specific supported access point and controller combinations will change from time to time and such changes are detailed in the respective firmware release notes. The Fortinet range of controllers, whether they are infrastructure or integrated into FortiOS, only support Fortinet provided access points. Note that not all access points are supported by all controller types.



GLOBAL HEADQUARTERS Fortinet Inc. 899 Kifer Road Sunnyvale, CA 94086 United States Tel: +1.408.235.7700 www.fortinet.com/sales

EMEA SALES OFFICE 905 rue Albert Einstein Valbonne 06560 Alpes-Maritimes, France Tel: +33.4.8987.0500

APAC SALES OFFICE 300 Beach Road 20-01 The Concourse Singapore 199555 Tel: +65.6395.2788

LATIN AMERICA SALES OFFICE Sawgrass Lakes Center 13450 W. Sunrise Blvd., Suite 430 Sunrise, FL 33323 United States Tel: +1.954.368.9990

Copyright© 2016 Fortinet, Inc. All rights reserved. Forticate®, Forticate®, Forticate® and FortiGate®, and certain other marks are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary and may be significantly lies effective than the metrics stated herein. Notifying herein retrieves the product or company names may be trademarks of their respective owners. Performance results and other metrics stated herein. Notifying herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet's General consists of the product with performance results and other implications and performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with performance metrics expressly variants that the identified product with per