

FortiWLC™ Wireless Controllers

FWC-50D, 200D, 500D, 1000D, 3000D and VMs

The FortiWLC controller series optimizes traffic across our controller-based wireless access points and client devices to support high density, high performance and predictability while addressing mission-critical enterprise demands for wireless connectivity.



End-to-end control over the wireless LAN for your organization

Each FortiWLC controller supports the performance requirements of the latest 802.11ac Wave II standard by providing double the performance of our existing wireless controllers. These high performance controllers also include support for both multi-channel and Virtual Cell/Single Channel technologies. It works with relevant Fortinet's controller-based access points to deliver data, voice, and video applications for small to large enterprises.

Powered by Fortinet's FWLC operating system, the FortiWLC creates a unified wireless LAN environment designed to deliver seamless mobility and superior reliability. FWLC optimizes client distribution and channel utilization in both single- and multi-channel deployments, maximizing efficiency to make the most of available wireless spectrum. Radio frequency virtualization simplifies deployment and allows easy capacity expansion as your needs evolve.

The controller manages authentication and encryption of our enterprise class controller-based access points. You can easily extend the FortiWLC capabilities with included features for policy enforcement and wireless intrusion prevention. As a Fortinet wireless controller, it integrates with the FortiWLM network management suite, which combines with FWLC to bring application visibility, intelligent management and resilient wireless services to your network. It also integrates with Fortinet Connect as part of a complete BYOD and guest access solution.



Features

- Powered by FWLC OS, and supports 802.11ac Wave II access points
- Radio frequency virtualization supported by patented Virtual Cell technology
- Controller-initiated, zero-loss handoffs and traffic load balancing
- Multilayered wireless LAN security: 802.1X authentication, encryption, firewall, and optional wireless IPS/IDS
- Seamless interoperability with multi-vendor network infrastructure

Benefits

- Delivers highly predictable, resilient wireless services in both single- and multi-channel deployments
- Simplifies deployment and capacity expansion for your wireless network
- Offers seamless wireless mobility with superior roaming reliability
- Protects sensitive data and aids in compliance
- Supports existing technology investment

SPECIFICATIONS

	FWC-50D	FWC-200D	FWC-500D
Application	Small enterprise, remote offices	Mid enterprise	Large enterprise
Hardware			
10/100/1000 Interfaces (Copper, RJ-45)	4	4	4
GE SFP Port	—	—	4
10 GE SFP+ Port	—	—	2
Console Port (RJ45, serial)	1	1	1
Internal Storage	60 GB SSD	120 GB SSD	2x 240 GB SSD
Capacity			
Maximum Access Points	50	200	500
Maximum Clients	1,250	2,500	6,250
Security			
Access Control	WEP, WPA-PSK, WPA-TKIP, WPA2-AES, 802.11i, 802.1X (EAP-TLS, EAP-TTLS, PEAP, LEAP, EAP-FAST, EAP-SIM, EAP-AKA, and EAP-MD5) Captive portal authentication against local database on the controller, RADIUS, and Active Directory RADIUS-assisted per-user and per-ESSID access control via MAC filtering		
Policy	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 policies		
Management & Networking			
Zero Configuration	Access points automatically discover controllers and download configuration settings for zero-touch, plug-and-play deployment		
System Management	Upgrades and management using System Director/Network Manager, support for SNMP, centralized WLAN security policies with multiple ESS profiles, VLAN-specific administrative/security policies		
Intelligent RF Management	Coordination of access points with load balancing for predictable performance		
VLAN Support	IEEE 802.1Q VLAN tagging, GRE Tunneling		
QoS	WMM support, dynamic WMM rate adaptation, configurable QoS rules per user and application		
Physical			
Mounting	rack mount (mounting kit required; included)	rack mount (mounting kit required; included)	rack mount (mounting kit required; included)
Height x Width x Length (inches)	1.73 x 17.32 x 8.62	1.73 x 17.01 x 13.76	1.73 x 17.24 x 16.18
Height x Width x Length (mm)	44 x 440 x 219	44 x 432 x 349.6	44 x 438 x 411
Weight	6.39 lbs (2.9 kg)	12.79 lbs (5.8 kg)	16.98 lbs (7.7 kg)
Form Factor	1 RU	1 RU	1 RU
Environment & Power			
Power Source	100–240V AC, 50–60 Hz, 65 W openframe single PSU	100–240V AC, 50–60 Hz, 250 W single PSU	100–240V AC, 50–60 Hz, 300 W Redundant PSU
Power Consumption (Average / Maximum)	31 W / 24 W	105 W / 76 W	197 W / 141 W
Current (Maximum)	100V/1.5A, 240V/1.5A	100V/4A, 240V/2A	100V/5A, 240V/3A
Heat Dissipation	106 BTU/h	358 BTU/h	672 BTU/h
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)	-13–158°F (-25–70°C)	-13–158°F (-25–70°C)
Humidity	5–95% (non-condensing)	5–95% (non-condensing)	5–95% (non-condensing)
Compliance			
Regulatory Approval	FCC Part 15B Class A, 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 A, RCM, BSMI		
Certification	RoHS, REACH, WEEE		

SPECIFICATIONS

	FWC-1000D	FWC-3000D
Application	Large enterprise	Large enterprise
Hardware		
10/100/1000 Interfaces (Copper, RJ-45)	—	—
GE SFP Port	—	—
10 GE SFP+ Port	4	8
Console Port (RJ45, serial)	1	1
Internal Storage	2x 480 GB SSD	2x 480 GB SSD
Capacity		
Maximum Access Points	1,000	3,000
Maximum Clients	10,000	30,000
Security		
Access Control	WEP, WPA-PSK, WPA-TKIP, WPA2-AES, 802.11i, 802.1X (EAP-TLS, EAP-TTLS, PEAP, LEAP, EAP-FAST, EAP-SIM, EAP-AKA, and EAP-MD5) Captive portal authentication against local database on the controller, RADIUS, and Active Directory RADIUS-assisted per-user and per-ESSID access control via MAC filtering	
Policy	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 policies.	
Management & Networking		
Zero Configuration	Access points automatically discover controllers and download configuration settings for zero-touch, plug-and-play deployment	
System Management	Upgrades and management using System Director/Network Manager, support for SNMP, centralized WLAN security policies with multiple ESS profiles, VLAN-specific administrative/security policies	
Intelligent RF Management	Coordination of access points with load balancing for predictable performance	
VLAN Support	IEEE 802.1Q VLAN tagging, GRE Tunneling	
QoS	WMM support, dynamic WMM rate adaptation, configurable QoS rules per user and application	
Physical		
Mounting	rack mount (mounting kit required; included)	rack mount (mounting kit required; included)
Height x Width x Length (inches)	3.46 x 17.24 x 22.56	3.46 x 17.24 x 22.56
Height x Width x Length (mm)	88 x 438 x 573	88 x 438 x 573
Weight	36.16 lbs (16.4 kg)	36.16 lbs (16.4 kg)
Form Factor	2 RU	2 RU
Environment & Power		
Power Source	100–240V AC, 50–60 Hz, 550W Redundant PSU	100–240V AC, 50–60 Hz, 550 W Redundant PSU
Power Consumption (Average / Maximum)	251 W / 343 W	403 W / 526 W
Current (Maximum)	100V/6.9A, 240V/2.8A	100V/6.9A, 240V/2.8A
Heat Dissipation	1,170.36 BTU/h	1,794.79 BTU/h
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)	-13–158°F (-25–70°C)
Humidity	5–95% (non-condensing)	5–95% (non-condensing)
Compliance		
Regulatory Approval	FCC Part 15B Class A, 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 A, RCM, BSMI	
Certification	RoHS, REACH, WEEE	

SPECIFICATIONS

	FWC-50D-VM	FWC-200D-VM	FWC-500D-VM	FWC-1000D-VM	FWC-3000D-VM
Application	Small enterprise	Mid enterprise	Large enterprise	Large Enterprise	Large Enterprise
Capacity					
Maximum Access Points	50	200	500	1,000	3,000
Maximum Clients	1,250	2,500	6,250	10,000	30,000
Virtual Configuration					
vCPU	4	4	8	24	48
RAM	4 GB	8 GB	16 GB	32 GB	64 GB
HDD Size	16 GB	16 GB	16 GB	16 GB	16 GB
Security					
Access Control	WEP, WPA-PSK, WPA-TKIP, WPA2-AES, 802.11i, 802.1X (EAP-TLS, EAP-TTLS, PEAP, LEAP, EAP-FAST, EAP-SIM, EAP-AKA, and EAP-MD5) Captive portal authentication against local database on the controller, RADIUS, and Active Directory RADIUS-assisted per-user and per-ESSID access control via MAC filtering				
Policy	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 policies				
Management & Networking					
Zero Configuration	Access points automatically discover controllers and download configuration settings for zero-touch, plug-and-play deployment				
System Management	Upgrades and management using System Director/Network Manager, support for SNMP, centralized WLAN security policies with multiple ESS profiles, VLAN-specific administrative/security policies				
Intelligent RF Management	Coordination of access points with load balancing for predictable performance				
VLAN Support	IEEE 802.1Q VLAN tagging, GRE Tunneling				
QoS	WMM support, dynamic WMM rate adaptation, configurable QoS rules per user and application				

ORDER INFORMATION

Product	SKU	Description
FortiWLC 50D Wireless Controller	FWC-50D	FortiWLC 50D Wireless LAN Controller, Maximum 50 APs, 4x 10/100/1000 ethernet ports.
FortiWLC 200D Wireless Controller	FWC-200D	FortiWLC 200D Wireless LAN Controller, Maximum 200 APs, 4x 10/100/1000 ethernet ports.
FortiWLC 500D Wireless Controller	FWC-500D	FortiWLC 500D Wireless LAN Controller, Maximum 500 APs, 4x 10/100/1000 ethernet ports (or 4 GE SFP), 2x 10 GE SFP ports.
FortiWLC 1000D Wireless Controller	FWC-1000D	FortiWLC 1000D Wireless LAN Controller, Maximum 1,000 APs, 4x 10 GE SFP+ ports, 2x GE MGMT ports, 2x 480 GB SSD Storage, Redundant PSU.
FortiWLC 3000D Wireless Controller	FWC-3000D	FortiWLC 3000D Wireless LAN Controller, Maximum 3,000 APs, 8x 10 GE SFP+ ports, 2x GE MGMT ports, 2x 480 GB SSD Storage, Redundant PSU.
FortiWLC Virtual Appliance License	FWC-VM-50	FortiWLC (FWC) WLAN Controller Virtual Appliance perpetual license to support up to 50 APs. Supports VMware, Hyper-V, and KVM hypervisors.
	FWC-VM-200	FortiWLC (FWC) WLAN Controller Virtual Appliance perpetual license to support up to 200 APs. Supports VMware, Hyper-V, and KVM hypervisors.
	FWC-VM-500	FortiWLC (FWC) WLAN Controller Virtual Appliance perpetual license to support up to 500 APs. Supports VMware, Hyper-V, and KVM hypervisors.
	FWC-VM-1000	FortiWLC (FWC) WLAN Controller Virtual Appliance perpetual license to support up to 1000 APs. Supports VMware, Hyper-V, and KVM hypervisors.
	FWC-VM-3000	FortiWLC (FWC) WLAN Controller Virtual Appliance perpetual license to support up to 3000 APs. Supports VMware, Hyper-V, and KVM hypervisors.

Notes:

The VM Licenses are not stackable nor can one be upgraded to the next, they are fixed configurations.

A single image is available from the support portal for each of the supported virtual environments. Once installed this image will operate for a limited number of APs for 30 days. A license must then be purchased for the virtual appliance which will lock its configuration permanently. The number of CPUs and memory allocation can then be manually adjusted to match the license purchased.



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
06560 Valbonne
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