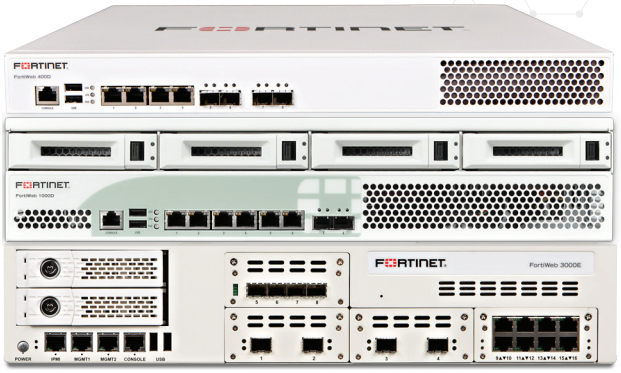
FortiWeb™

FortiWeb 100D, 400D, 600D, 1000E, 2000E, 3000E, 3010E, 4000E and VM

FortiWeb is a web application firewall (WAF) that protects hosted web applications from attacks that target known and unknown exploits. Using multi-layered and correlated detection methods, FortiWeb defends applications from known vulnerabilities and from zero-day threats.



Acceleration and Performance

Multi-core processor technology combined with hardware-based SSL tools deliver blazing fast protected WAF throughput.

Application Protection

Protection from the OWASP Top Ten application attacks including Cross Site Scripting and SQL Injection.

Enhanced Detection

Built-in advanced detection tools monitor usage, track user sessions, and parse suspicious commands to detect sophisticated attack types.

Highlights

- High performance with up to 20 Gbps of throughput
- Correlated, multi-layer threat scanning
- User Scoring and Session Tracking
- Simplified deployment and enhanced protection with FortiGate and FortiSandbox
- Included vulnerability scanner
- Transparent user validation for botnet protection

FortiCare Worldwide 24/7 Support

support.fortinet.com

FortiGuard Security Services

www.fortiguard.com

Third-Party Certification

ICSA labs CERTIFIED WEB APPLICATION FIREWALL

HIGHLIGHTS

Externally-facing web applications are vulnerable to attacks such as cross site scripting, SQL injection, and Layer 7 Denial of Service (DoS). Internal web applications are even easier to compromise if an attacker is able to gain access to an internal network where many organizations think they're protected by their perimeter network defenses. Custom code is usually the weakest link as development teams have the impossible task of staying on top of every new attack type. However, even commercial code is vulnerable as many organizations don't have the resources to apply patches and security fixes as soon as they're made available. Even if you apply every patch and have an army of developers to protect your systems, zero-day attacks can leave you defenseless and only able to respond after the attack has occurred.

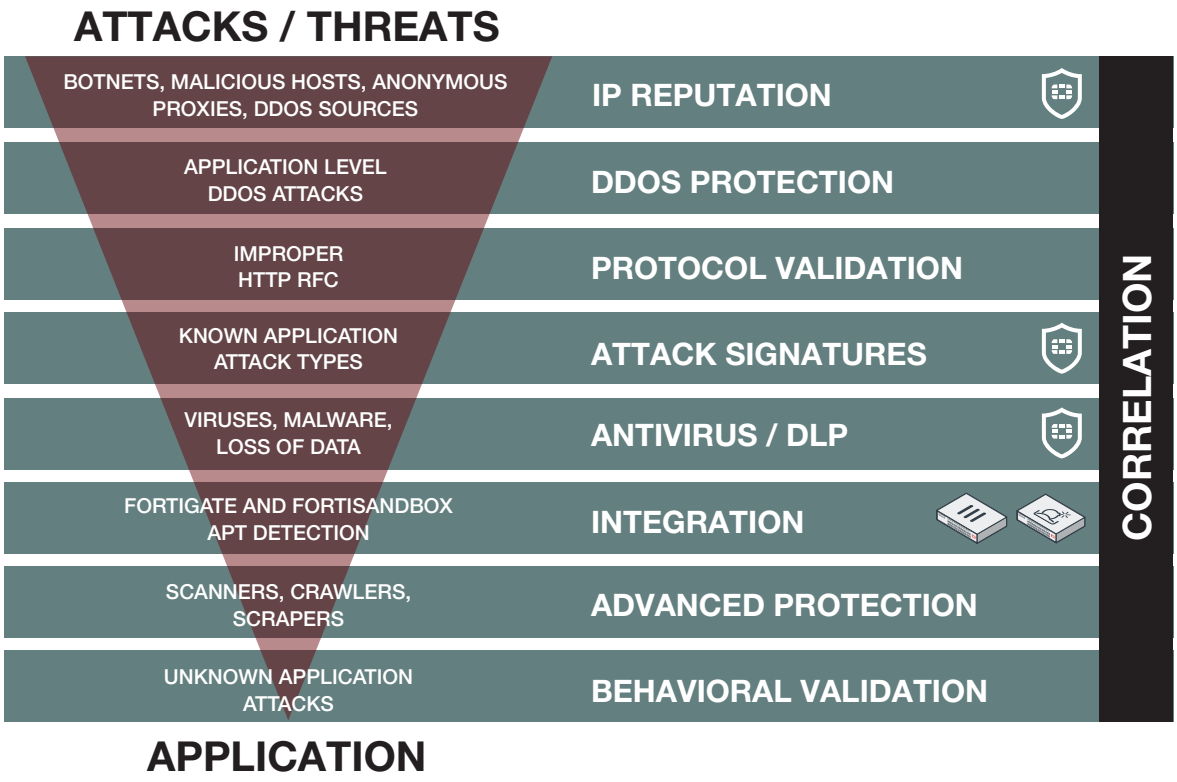
Comprehensive Web Application Security with FortiWeb

Using an advanced multi-layered and correlated approach, FortiWeb provides complete security for your external and internal web-based applications from the OWASP Top 10 and many other threats. Using IP Reputation services, botnets and other malicious sources are automatically screened out before they can do any damage. DoS detection and prevention keeps your applications safe from being overloaded by Layer 7 DoS attacks.

FortiWeb checks that the request hasn't been manipulated using HTTP RFC validation. Requests are checked against FortiWeb's signatures to compare them against known attack types to make sure they're clean. Any files, attachments or code are scrubbed with FortiWeb's built-in antivirus and antimalware services. FortiWeb's auto-learning behavioral detection engine reviews all requests that have passed the tests for known attacks. If the request is outside of user or automatic parameters, the request is blocked. Lastly, FortiWeb provides a correlation engine where multiple events from different security layers are correlated to make a more accurate decision and help protect against the most sophisticated attacks. This combination provides near-100% protection from any web application attack, including zero-day threats that signature file-based systems can't detect.

Included Vulnerability Scanning

Only FortiWeb includes a web application vulnerability scanner in every appliance at no extra cost to help you meet PCI DSS compliance. FortiWeb's vulnerability scanning dives deep into all application elements and provides in-depth results of potential weaknesses in your applications. Vulnerability scanning is always up-to-date with regular updates from FortiGuard Labs.



HIGHLIGHTS

Deep Integration with FortiGate and FortiSandbox

As the threat landscape evolves, many new threats require a multi-pronged approach for protecting web-based applications. Advanced Persistent Threats that target users can take many different forms than traditional single-vector attack types and can evade protections offered only by a single device. FortiWeb's integration with FortiGate and FortiSandbox extend basic WAF protections through synchronization and sharing of threat information to both deeply scan suspicious files and share infected internal sources.

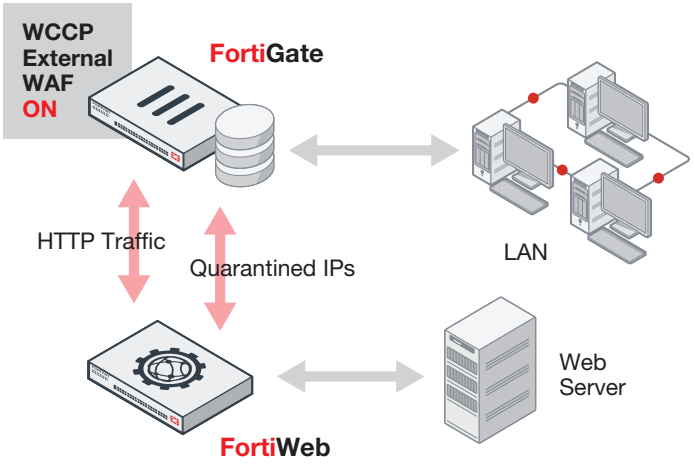
FortiWeb is one of many Fortinet products that provides integration with our FortiSandbox advanced threat detection platform. FortiWeb can be configured with FortiSandbox to share threat information and block threats as they're discovered in the sandboxing environment. Files uploaded to web servers can be sent to FortiSandbox and FortiSandbox Cloud for analysis. Alerts are sent immediately when malicious files are identified and future similar files are blocked immediately.

Integration with FortiGate enables the sharing of quarantined IP addresses detected and maintained on the FortiGate firewall. Through regular polling of the FortiGate, FortiWeb is up-to-date with the latest list of internal sources that have or are suspected of being infected and blocks traffic from these devices from doing more damage.

Additionally, FortiGate users can now simplify the deployment of FortiWeb in a Fortinet-based network. Using the WCCP protocol, a FortiGate can be configured to direct HTTP traffic for inspection to a FortiWeb without having to manually configure routers or DNS services. Users can set up custom rules to route specific traffic using comprehensive granular forwarding policies.

Advanced False Positive Mitigation Tools with User Scoring and Session Tracking

False positive detections can be very disruptive if a web application firewall isn't configured correctly. Although the installation of a WAF may only take minutes, fine tuning it to minimize false positives can take days or even weeks, plus there's the regular ongoing adjustments for application and environment changes. FortiWeb combats this problem with many sophisticated tools including alert tuning, white lists, automatic learning exceptions, correlated threat detection, and advanced syntax analysis to validate SQL-based injection attacks.



FortiWeb seamlessly integrates with FortiGate to pass HTTP traffic for inspection and shares Quarantined IP information.

FortiWeb is the only WAF that employs User Scoring and Session Tracking to further enhance our False Positive Mitigation tools. Administrators can attach threat levels to any of FortiWeb's WAF protections then set trigger thresholds that can block, report or monitor users that cross a combined multi-event violation score over the lifetime of their session. Never before has this level of customization and advanced correlation been available in a WAF and it can dramatically reduce the number of false positive detections depending on the level of sensitivity set by the administrator.

FortiWeb User Tracking

FortiWeb monitors users authenticating to web applications and tracks all their subsequent activity. All traffic and attack logs are attached with the username allowing rule enforcement and forensics at the user level.

Secured by FortiGuard

Fortinet's Award-winning FortiGuard Labs is the backbone for many of FortiWeb's layers in its approach to application security. Offered as 3 separate options, you can choose the FortiGuard services you need to protect your web applications. FortiWeb IP Reputation service protects you from known attack sources like botnets, spammers, anonymous proxies, and sources known to be infected with malicious software. FortiWeb Security Service is designed just for FortiWeb including items such as application layer signatures, malicious robots, suspicious URL patterns and web vulnerability scanner updates. Finally, FortiWeb offers FortiGuard's top-rated antivirus engine that scans all file uploads for threats that can infect your servers or other network elements.

HIGHLIGHTS

Virtual Patching

FortiWeb provides integration with leading third-party vulnerability scanners including Acunetix, HP WebInspect, IBM AppScan, Qualys IBM QRadar and WhiteHat to provide dynamic virtual patches to security issues in application environments. Vulnerabilities found by the scanner are quickly and automatically turned into security rules by FortiWeb to protect the application until developers can address them in the application code.

Blazing Fast SSL Offloading

FortiWeb is able to process up to tens of thousands of web transactions by providing hardware accelerated SSL offloading in most models. With near real-time decryption and encryption using ASIC-based chipsets, FortiWeb can easily detect threats that target secure applications.

Application Delivery and Authentication

FortiWeb provides advanced Layer 7 load balancing and authentication offload services. FortiWeb can easily expand your applications across multiple servers using intelligent, application-aware Layer 7 load balancing and can be combined with SSL offloading for load balancing secure application traffic. Using HTTP compression, FortiWeb can also improve bandwidth utilization and user response times for content-rich applications. Authentication offloading integrates with many authentication services including LDAP, NTLM, Kerberos and RADIUS with 2-factor authentication for RADIUS and RSA SecureID. Using these authentication services, you can easily publish websites and use Single Sign On (SSO) for any web application including Microsoft applications such as Outlook Web Access and SharePoint. Finally, FortiWeb can improve application response times by caching often-used content to serve it to users faster than having to request the same information each time it is needed.

VM and Cloud Options

FortiWeb provides maximum flexibility in supporting your virtual and hybrid environments. The virtual versions of FortiWeb support all the same features as our hardware-based devices and work with all the top hypervisors including VMware, Microsoft Hyper-V, Citrix XenServer, Open Source Xen and KVM. FortiWeb is also available for Amazon Web Services and Microsoft Azure.

Central Management and Reporting

FortiWeb offers the tools you need to manage multiple appliances and gain valuable insights on attacks that target your applications. From within a single management console you can configure and manage multiple FortiWeb gateways using our VMware-based central management utility. If you need an aggregated view of attacks across your network, FortiWeb easily integrates into our FortiAnalyzer reporting appliances for centralized logging and report consolidation from multiple FortiWeb devices.

FEATURES

Deployment options

- Reverse Proxy
- Inline Transparent
- True Transparent Proxy
- Offline Sniffing
- WCCP

Web Security

- Automatic profiling (white list)
- Web server and application signatures (black list)
- IP Reputation
- IP Geolocation
- HTTP RFC compliance
- Native support for HTTP/2

Application Attack Protection

- OWASP Top 10
- Cross Site Scripting
- SQL Injection
- Cross Site Request Forgery
- Session Hijacking
- Built-in Vulnerability Scanner
- Third-party scanner integration (virtual patching)

Security Services

- Web services signatures
- XML and JSON protocol conformance
- Malware detection
- Virtual patching
- Protocol validation
- Brute force protection
- Cookie signing and encryption
- Custom error message and error code handling
- Operating system intrusion signatures
- Known threat and zero-day attack protection
- L4 Stateful Network Firewall
- DoS prevention
- Advanced correlation protection using multiple security elements
- Data leak prevention
- Web Defacement Protection

Application Delivery

- Layer 7 server load balancing
- URL Rewriting
- Content Routing
- HTTPS/SSL Offloading
- HTTP Compression
- Caching

Authentication

- Active and passive authentication
- Site Publishing and SSO
- RSA Access for 2-factor authentication
- LDAP and RADIUS support
- SSL client certificate support

Management and Reporting

- Web user interface
- Command line interface
- Central management for multiple devices
- Active/Active HA Clustering
- REST API
- Centralized logging and reporting
- Real-time dashboards
- Bot dashboard
- Geo IP Analytics
- SNMP, Syslog and email Logging/Monitoring
- Administrative Domains with full RBAC

Other

- IPv6 Ready
- HTTP/2 to HTTP 1.1 translation
- HSM Integration
- High Availability with Config-sync for syncing across multiple active appliances
- Auto setup and default configuration settings for simplified deployment
- Setup Wizards for common applications and databases
- Preconfigured for common Microsoft applications; Exchange, SharePoint, OWA
- OpenStack support for FortiWeb VMs
- Predefined security policies for Drupal and Wordpress applications
- WebSockets support

SPECIFICATIONS

	FORTIWEB 100D	FORTIWEB 400D	FORTIWEB 600D	FORTIWEB 1000E
Hardware				
10/100/1000 Interfaces (RJ-45 ports)	4	4 GE RJ45, 4 SFP GE	4 GE RJ45 (2 bypass), 4 SFP GE	6 (4 bypass), 4x SFP GE (non-bypass)
10G BASE-SR SFP+ Ports	0	0	0	2
SSL/TLS Processing	Software	Software	Software	Hardware
USB Interfaces	2	2	2	2
Storage	16 GB	240 GB SSD	240 GB SSD	2x 2 TB
Form Factor	Desktop	1U	1U	2U
Power Supply	Single	Single	Dual	Dual Hot Swappable
System Performance				
Throughput	25 Mbps	100 Mbps	250 Mbps	1.3 Gbps
Latency	Sub-ms	Sub-ms	Sub-ms	Sub-ms
High Availability	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering
Application Licenses	Unlimited	Unlimited	Unlimited	Unlimited
Administrative Domains	0	32	32	64
All performance values are "up to" and vary depending on the system configuration.				
Dimensions				
Height x Width x Length (inches)	1.61 x 8.27 x 5.24	1.73 x 17.24 x 16.38	1.73 x 17.24 x 16.38	3.46 x 16.93 x 19.73
Height x Width x Length (mm)	41 x 210 x 133	44 x 438 x 416	44 x 438 x 416	88 x 430 x 501.20
Weight	2.3 lbs (1.1 kg)	22 lbs (9.97 kg)	22 lbs (9.97 kg)	28 lbs (12.8 kg)
Rack Mountable	Optional	Yes	Yes	Yes, with flanges
Environment				
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
Maximum Current	110V/1.2A, 220V/1.2A	100V/5A, 240V/3A	100V/5A, 240V/3A	100V/5A, 240V/3A
Power Consumption (Average)	18 W	109 W	109 W	140 W
Heat Dissipation	74 BTU/h	446.3 BTU/h	446.3 BTU/h	471 BTU/h
Operating Temperature	32–104°F (0–40°C)	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)	-4–158°F (-20–70°C)
Humidity	10–90% non-condensing	10–90% non-condensing	10–90% non-condensing	5–90% non-condensing
Compliance				
Safety Certifications	FCC Class A Part 15, C-Tick, VCCI, CE, UL/cUL, CB	FCC Class A Part 15, C-Tick, VCCI, CE, UL/CB/cUL	FCC Class A Part 15, C-Tick, VCCI, CE, UL/CB/cUL	FCC Class A Part 15, C-Tick, VCCI, CE, UL/CB/cUL

FortiWeb 100D

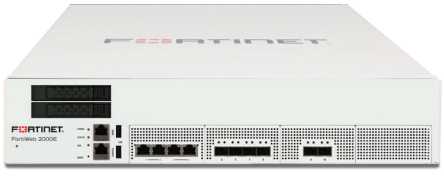
FortiWeb 400D

FortiWeb 600D

FortiWeb 1000E

SPECIFICATIONS

	FORTIWEB 2000E	FORTIWEB 3000E	FORTIWEB 3010E	FORTIWEB 4000E
Hardware				
10/100/1000 Interfaces (RJ45 ports)	4 bypass, 4 SFP GE (non-bypass)	8 bypass, 4 SFP GE (non-bypass)	8 bypass, 4 SFP GE (non-bypass)	8 bypass, 4 SFP GE (non-bypass)
10G BASE-SR SFP+ Ports	2	4	4 (2 bypass)	4 (2 bypass)
SSL/TLS Processing	Hardware	Hardware	Hardware	Hardware
USB Interfaces	2	2	2	2
Storage	2x 1 TB	2x 2 TB	2x 2 TB	2x 2 TB
Form Factor	2U	2U	2U	2U
Power Supply	Dual Hot Swappable	Dual Hot Swappable	Dual Hot Swappable	Dual Hot Swappable
System Performance				
Throughput	2.5 Gbps	5 Gbps	5 Gbps	20 Gbps
Latency	Sub-ms	Sub-ms	Sub-ms	Sub-ms
High Availability	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering
Application Licenses	Unlimited	Unlimited	Unlimited	Unlimited
Administrative Domains	64	64	64	64
All performance values are "up to" and vary depending on the system configuration.				
Dimensions				
Height x Width x Length (inches)	3.5 x 17.2 x 20.8	3.5 x 17.5 x 22.6	3.5 x 17.5 x 22.6	3.5 x 17.5 x 22.6
Height x Width x Length (mm)	88 x 438 x 530	88 x 444 x 574	88 x 444 x 574	88 x 444 x 574
Weight	33 lbs (15 kg)	56.2 lbs (22.5 kg)	56.2 lbs (22.5 kg)	56.2 lbs (22.5 kg)
Rack Mountable	Yes	Yes	Yes	Yes
Environment				
Power Required	100–240V AC, 60–50 Hz	100–240V AC, 60–50 Hz	100–240V AC, 60–50 Hz	100–240V AC, 60–50 Hz
Maximum Current	120V/6A, 240V/3A	120V/2.6A, 240V/1.3A	120V/2.6A, 240V/1.3A	120V/3A, 240V/1.5A
Power Consumption (Average)	200 W	200 W	200 W	248.5 W
Heat Dissipation	1433 BTU/h	1045.5 BTU/h	1045.5 BTU/h	1219.8 BTU/h
Operating Temperature	32–104°F (0–40°C)	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)	-13–158°F (-25–70°C)
Humidity	5–95% non-condensing	5–95% non-condensing	5–95% non-condensing	5–95% non-condensing
Compliance				
Safety Certifications	FCC Class A Part 15, C-Tick, VCCI, CE, UL/CB/cUL	FCC Class A Part 15, C-Tick, VCCI, CE, UL/CB/cUL	FCC Class A Part 15, C-Tick, VCCI, CE, UL/CB/cUL,	FCC Class A Part 15, C-Tick, VCCI, CE, UL/CB/cUL,



FortiWeb 2000E

FortiWeb 3000E

FortiWeb 3010E

FortiWeb 4000E

SPECIFICATIONS

	FORTIWEB-VM (1 VCPU)	FORTIWEB-VM (2 VCPU)	FORTIWEB-VM (4 VCPU)	FORTIWEB-VM (8 VCPU)
System Performance				
HTTP Throughput	25 Mbps	100 Mbps	500 Mbps	2 Gbps
Application Licenses	Unlimited	Unlimited	Unlimited	Unlimited
Administrative Domains	4 to 64 based on the amount of memory allocated			
Virtual Machine				
Hypervisor Support	VMware, Microsoft Hyper-V, Citrix XenServer, Open Source Xen, KVM, Amazon Web Services (AWS) and Microsoft Azure. Please see FortiWeb VM Installation Guide for versions supported.			
vCPU Support (Minimum / Maximum)	1	2	2 / 4	2 / 8
Network Interface Support (Minimum / Maximum)	1 / 4 (10 VMware ESX)	1 / 4 (10 VMware ESX)	1 / 4 (10 VMware ESX)	1 / 4 (10 VMware ESX)
Storage Support (Minimum / Maximum)	40 GB / 2 TB	40 GB / 2 TB	40 GB / 2 TB	40 GB / 2 TB
Memory Support (Minimum / Maximum)	1,024 MB / Unlimited for 64-bit	1,024 MB / Unlimited for 64-bit	1,024 MB / Unlimited for 64-bit	1,024 MB / Unlimited for 64-bit
Recommended Memory	4 GB	4 GB	4 GB	4 GB
High Availability Support	Yes	Yes	Yes	Yes

Actual performance values may vary depending on the network traffic and system configuration. Performance metrics were observed using a Dell PowerEdge R710 server (2x Intel Xeon E5504 2.0 GHz 4 MB Cache) running VMware ESXi 5.5 with 4 GB of vRAM assigned to the 4 vCPU and 8 vCPU FortiWeb Virtual Appliance and 4 GB of vRAM assigned to the 2 vCPU FortiWeb Virtual Appliance.

ORDER INFORMATION

Product	SKU	Description
FortiWeb 100D	FWB-100D	Web Application Firewall — 4x GE RJ45 ports, 16 GB storage.
FortiWeb 400D	FWB-400D	Web Application Firewall — 4x GE RJ45 ports, 4x GE SFP ports, 240 GB SSD storage.
FortiWeb 600D	FWB-600D	Web Application Firewall — 4x GE RJ45 ports (2x bypass), 4x GE SFP ports, 240 GB SSD storage.
FortiWeb 1000E	FWB-1000E	Web Application Firewall — 2x 10 GE SFP+ ports, 2x GE RJ45 ports, 4x GE RJ45 bypass ports, 4x GE SFP ports, dual AC power supplies, 2 TB storage.
FortiWeb 2000E	FWB-2000E	Web Application Firewall — 2x 10 GE SFP+ ports, 4x GE RJ45 bypass ports, 4x GE SFP ports, dual AC power supplies, 2 TB storage.
FortiWeb 3000E	FWB-3000E	Web Application Firewall — 4x 10 GE SFP+ ports, 8x GE RJ45 bypass ports, 4x GE SFP ports, dual AC power supplies, 2x 2 TB storage.
FortiWeb 3010E	FWB-3010E	Web Application Firewall — 8x GE RJ45 bypass ports, 4x GE SFP ports, 2x 10G SFP+ bypass ports, 2x 10G SFP+ ports, dual AC power supplies, 2x 2 TB HDD storage.
FortiWeb 4000E	FWB-4000E	Web Application Firewall — 8x GE RJ45 bypass ports, 4x GE SFP ports, 2x 10G SFP+ bypass ports, 2x 10G SFP+ ports, dual AC power supplies, 2x 2 TB HDD storage.
FortiWeb-VM01	FWB-VM01	FortiWeb-VM, up to 1 vCPU supported. 64-bit OS.
FortiWeb-VM02	FWB-VM02	FortiWeb-VM, up to 2 vCPUs supported. 64-bit OS.
FortiWeb-VM04	FWB-VM04	FortiWeb-VM, up to 4 vCPUs supported. 64-bit OS.
FortiWeb-VM08	FWB-VM08	FortiWeb-VM, up to 8 vCPUs supported. 64-bit OS.
Central Manager 10	FWB-CM-BASE	FortiWeb Central Manager license key, manage up to 10 FortiWeb devices, VMware vSphere.
Central Manager Unlimited	FWB-CM-UL	FortiWeb Central Manager license key, manage unlimited number of FortiWeb devices, VMware vSphere.

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