

Boost Your Data Center’s Performance and Security with the FortiGate 7000F Series

Data Center Firewalls Are a Critical Element of the Hybrid Network

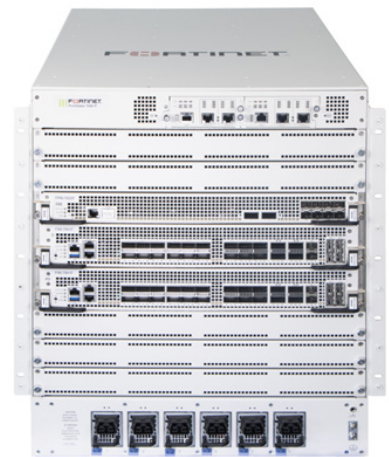
To keep up with rapid change and the expanding attack surface, caused in part by distributed workforces, today’s organizations need agile hybrid network architectures. While this fusion of physical, virtual, and cloud infrastructure reshapes data center roles, it doesn’t eliminate their importance or the requirement for robust security. The data center is still key for housing applications and data that is not located in the cloud. As such, data center firewalls remain critical for protecting against evolving threats across complex, hybrid environments, ensuring secure, high-volume traffic flow between data centers, cloud, branches, and remote users.

FortiGate: Far Better Than the Industry Standard

The FortiGate 7000F series delivers unparalleled value as an all-in-one cybersecurity solution that integrates high-performance networking and security. Designed to safeguard mission-critical data across hybrid IT infrastructures, it provides:

- 5x more next-generation firewall (NGFW) throughput
- 2x improved threat protection
- 2x IPsec VPN throughput
- 73% more energy-efficiency per Gbps

Consolidating security services into a single, easy-to-manage platform with AI-powered protection and automation reduces operational complexity and improves compliance. The FortiGate 7000F series eco-friendly design helps enterprises lower energy costs while maintaining top-tier security. As the only NGFW offering built-in SD-WAN, universal ZTNA, inline sandboxing, and SOC-as-a-Service, the FortiGate 7000F series optimizes performance, scalability, and ROI.



FG-7000F Series NGFW

Fortinet Security Compute Rating Table

Specification	FortiGate 7080F	Secure Compute Rating	Industry Average	Palo Alto Networks PA-5450	Check Point QLS 800	Cisco Firepower 9300	Juniper Networks SRX 5800
Firewall (Gbps)	1190	2.9x	410	200	205	235	1000
NGFW (Gbps)	330	5.3x	62.5	-	96	29	-
IPsec VPN (Gbps)	370	3.4x	110	87	49	74	230
Threat protection (Gbps)	312	3.4x	92.5	152.5	33	-	-
SSL inspection (Gbps)	320	11.4x	28	-	-	28	-
Concurrent sessions	600 million	3.6x	~166 million	100 million	32 million	195 million	338 million
Watts per Gbps threat protection	23.4	2.5x	58.5	23	93.9	-	-

Eliminate Point Products and Reduce Complexity

Building on Fortinet's proven high-performance security, the FortiGate 7000F series eliminates point products by consolidating security functions to reduce complexity and deliver industry-leading ROI. With 1.2 Tbps firewall throughput and 312 Gbps threat protection, the FortiGate 7000F series significantly outperforms competitors while consuming less power. The modular design, featuring an energy-efficient chassis, Fortinet processor modules, and 400 GE ports, simplifies scaling and ensures businesses can adapt to evolving network demands without operational downtime. Fortinet remains the sole vendor offering 400 GE ports, providing a significant advantage.

Get the ASIC Advantage

Fortinet's proprietary ASIC architecture delivers unmatched security performance and efficiency, ensuring your organization can scale without compromising speed or protection. By providing faster threat prevention with lower latency, it enables seamless user experiences and keeps critical applications running smoothly. Its energy-efficient design reduces power consumption and cooling costs, driving significant cost savings while supporting sustainability goals.

With higher performance at a lower total cost of ownership, your organization can optimize resources, reduce operational complexity, and future-proof its network infrastructure. Fortinet's ASIC-powered security ensures maximum protection, minimal delays, and a stronger return on investment, so you can focus on business growth with confidence.

Our NP7 network processor delivers trail-blazing VXLAN hardware acceleration and IPsec elephant flows. The NP7 is designed to accelerate essential network functions, such as IPv4, IPv6, multicast, GRE, and IPsec decryption, among others. And the FortiGate 7000F series supports 4.5 million connections per second session setup speeds for firewall and NAT sessions, supplying hyperscale security for hyperscale data centers.

Accelerate Security Functions

The FortiGate 7000F series also addresses the need to find and mitigate risk as quickly as possible. Our CP9 content processor acts as a co-processor to the main CPU to offload resource-intensive processing and drive content inspection to accelerate security functions. Additionally, the CP9 performs fast inspection of real-time traffic for application identification, all without compromising user experience. It enables full network visibility, thus eliminating blind spots.

The parallel path processing architecture embodied with our latest NP7 and CP9 security processors offers unmatched L4-L7 performance. These all-new capabilities build on the industry-leading security and threat detection included in all of the Fortinet NGFW offerings:

- The FortiOS operating system is the foundation of the Fortinet Security Fabric, the industry's highest-performing cybersecurity mesh platform that delivers coordinated detection and enforcement across the entire attack surface. FortiOS provides centralized, unified management and visibility across the network.
- FortiGuard AI-Powered Security Services, developed by FortiGuard Labs (the Fortinet elite cybersecurity research organization), counters threats in real time with machine-learning-powered, coordinated protection.
- Intrusion prevention provides the most up-to-date defenses against stealthy network-level threats to protect organizations from thousands of IPS signatures covering known vulnerabilities and exploits.
- The application control service quickly creates policies to allow, deny, or restrict access to applications or entire categories of applications to keep malicious, risky, and unwanted applications out of your network through control points like the data center.



FortiGates: The Ideal Hybrid Mesh Firewalls

As businesses increasingly turn to hybrid environments to address the rise in cloud-based applications and remote workforces, it's critical for NGFWs to work in conjunction with firewalls deployed across the network, including in the cloud.

Hybrid mesh firewall (HMF) is an emerging term for a unified security platform that provides coordinated protection to multiple areas of enterprise IT, including corporate sites such as branches, campuses, and data centers; public and private clouds; and remote workers.

Because FortiGate and all other Fortinet firewall solutions were and continue to be built on FortiOS, we have delivered on the HMF concept for years. Using Fortinet solutions empowers IT teams with centralized, unified management and an open ecosystem that enables consistent security policies across all firewall deployments.

To learn more about the FortiGate 7000F series and our associated services for the data center, visit the [Fortinet NGFW](#) webpage.



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