



FortiGate® 2000E

Next Generation Firewall
Internal Segmentation Firewall
Data Center Firewall



FortiGate 2000E

The Fortinet Enterprise Firewall Solution

The Fortinet Enterprise Firewall Solution delivers end-to-end network security with one platform, one network security operating system and unified policy management with a single pane of glass — for the industry’s best protection against the most advanced security threats and targeted attacks.

One Enterprise Firewall Solution across the Extended Enterprise

The FortiGate family of network appliances represents the industry’s broadest range of enterprise firewall platforms. FortiGate is based on FortiASIC, a purpose-built integrated architecture that provides extremely high throughput and exceptionally low latency, while delivering industry-leading security effectiveness and consolidation which is routinely validated by independent real-world tests. Targeted for large enterprises, the FortiGate 2000E delivers high NGFW and SSL inspection performance along with high port density and dual power supply for maximum flexibility.

Highlights

	Firewall	IPS	NGFW	Threat Protection	Interfaces
	Enterprise Traffic Mix				
FG-2000E	90 Gbps	11.5 Gbps	9 Gbps	5.4 Gbps	Multiple 10 GE SFP+ and GE RJ45

Validated Security

One Network OS

Performance

Single Pane of Glass

Universal Platform Support



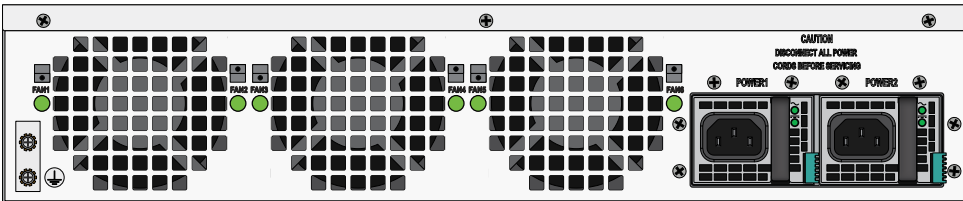
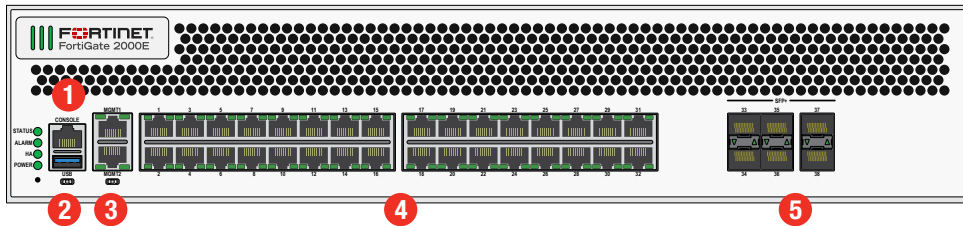
FortiGate appliances, interconnected with the Fortinet Security Fabric, form the backbone of the Fortinet Enterprise Solution

forti.net/sf



HARDWARE

FortiGate 2000E



Interfaces

- | | |
|--|--|
| <ul style="list-style-type: none"> 1. Console Port 2. USB Port 3. 2x GE RJ45 Management Ports | <ul style="list-style-type: none"> 4. 32x GE RJ45 Ports 5. 6x 10 GE SFP+ Slots |
|--|--|

NP Direct

By removing the Internal Switch Fabric, the NP Direct architecture provides direct access to the FortiASIC-NP for the lowest latency forwarding. NGFW deployments require some attention to network design to ensure optimal use of this technology.



Powered by FortiASICs

- Custom FortiASIC™ processors deliver the power you need to detect malicious content at multi-Gigabit speeds
- Other security technologies cannot protect against today's wide range of content and connection-based threats because they rely on general-purpose CPUs, causing a dangerous performance gap
- FortiASIC processors provide the performance needed to block emerging threats, meet rigorous third-party certifications, and ensure that your network security solution does not become a network bottleneck

Network Processor

Fortinet's new, breakthrough FortiASIC NP6 network processor works inline with FortiOS functions delivering:

- Superior firewall performance for IPv4/IPv6, SCTP and multicast traffic with ultra-low latency down to 3 microseconds
- VPN, CAPWAP and IP tunnel acceleration
- Anomaly-based intrusion prevention, checksum offload and packet defragmentation
- Traffic shaping and priority queuing

Content Processor

Fortinet's new, breakthrough FortiASIC CP9 content processor works outside of the direct flow of traffic and accelerates the inspection of computationally intensive security features:

- Enhanced IPS performance with unique capability of full signature matching at ASIC
- SSL Inspection capabilities based on the latest industry mandated cipher suites
- Encryption and decryption offloading

10 GE Connectivity

High speed connectivity is essential for network security segmentation at the core of data networks. The FortiGate 2000E provides high 10 GE port densities, simplifying network designs without relying on additional devices to bridge desired connectivity.

SOFTWARE

FortiOS

Control all the security and networking capabilities across the entire FortiGate platform with one intuitive operating system. Reduce operating expenses and save time with a truly consolidated next generation security platform.



- A truly consolidated platform with one OS for all security and networking services for all FortiGate platforms.
- Industry-leading protection: NSS Labs Recommended, VB100, AV Comparatives and ICSA validated security and performance.
- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings.
- Detect, contain and block advanced attacks automatically in minutes with integrated advanced threat protection framework.
- Solve your networking needs with extensive routing, switching, WiFi, LAN and WAN capabilities.
- Activate all the ASIC-boosted capabilities you need on the fastest firewall platform available.



For more information, please refer to the FortiOS data sheet available at www.fortinet.com

SERVICES

FortiGuard™ Security Services

FortiGuard Labs offers real-time intelligence on the threat landscape, delivering comprehensive security updates across the full range of Fortinet's solutions. Comprised of security threat researchers, engineers, and forensic specialists, the team collaborates with the world's leading threat monitoring organizations, other network and security vendors, as well as law enforcement agencies:

- **Real-time Updates** — 24x7x365 Global Operations research security intelligence, distributed via Fortinet Distributed Network to all Fortinet platforms.
- **Security Research** — FortiGuard Labs have discovered over 170 unique zero-day vulnerabilities to date, totaling millions of automated signature updates monthly.
- **Validated Security Intelligence** — Based on FortiGuard intelligence, Fortinet's network security platform is tested and validated by the world's leading third-party testing labs and customers globally.

FortiCare™ Support Services

Our FortiCare customer support team provides global technical support for all Fortinet products. With support staff in the Americas, Europe, Middle East and Asia, FortiCare offers services to meet the needs of enterprises of all sizes:

- **Enhanced Support** — For customers who need support during local business hours only.
- **Comprehensive Support** — For customers who need around-the-clock mission critical support, including advanced exchange hardware replacement.
- **Advanced Services** — For global or regional customers who need an assigned Technical Account Manager, enhanced service level agreements, extended software support, priority escalation, on-site visits and more.
- **Professional Services** — For customers with more complex security implementations that require architecture and design services, implementation and deployment services, operational services and more.



Enterprise Bundle

FortiGuard Labs delivers a number of security intelligence services to augment the FortiGate firewall platform. You can easily optimize the protection capabilities of your FortiGate with the FortiGuard Enterprise Bundle. This bundle contains the full set of FortiGuard security services plus FortiCare service and support offering the most flexibility and broadest range of protection all in one package.

SPECIFICATIONS

FORTIGATE 2000E	
Hardware Specifications	
Hardware Accelerated 10 GE SFP+ Slots	6
Hardware Accelerated GE RJ45 Ports	32
GE RJ45 Management / HA Ports	2
USB Ports	1
Console Port	1
Onboard Storage	480 GB
Included Transceivers	2x SFP+ (SR 10GE)
System Performance	
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)	90 / 90 / 60 Gbps
IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP)	90 / 90 / 60 Gbps
Firewall Latency (64 byte, UDP)	2 µs
Firewall Throughput (Packet per Second)	90 Mpps
Concurrent Sessions (TCP)	20 Million
New Sessions/Second (TCP)	500,000
Firewall Policies	100,000
IPsec VPN Throughput (512 byte)	65 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	20,000
Client-to-Gateway IPsec VPN Tunnels	50,000
SSL-VPN Throughput	6 Gbps
Concurrent SSL-VPN Users (Recommended Maximum)	10,000
IPS Throughput (HTTP / Enterprise Mix) ¹	25 / 11.5 Gbps
SSL Inspection Throughput ²	12.5 Gbps
Application Control Throughput ³	15 Gbps
NGFW Throughput ⁴	9 Gbps
Threat Protection Throughput ⁵	5.4 Gbps
CAPWAP Throughput ⁶	21 Gbps
Virtual Domains (Default / Maximum)	10 / 500
Maximum Number of FortiAPs (Total / Tunnel)	4,096 / 1,024
Maximum Number of FortiTokens	5,000
Maximum Number of Registered Endpoints	8,000
High Availability Configurations	Active-Active, Active-Passive, Clustering

FORTIGATE 2000E	
Dimensions	
Height x Width x Length (inches)	3.5 x 17.4 x 21.9
Height x Width x Length (mm)	89 x 442 x 555
Weight	37.0 lbs (16.8 kg)
Form Factor	Rack Mount, 2 RU
Power	
AC Power Supply	100–240V AC, 50–60 Hz
Maximum Current	9A
Power Consumption (Average / Maximum)	280 / 430 W
Heat Dissipation	1,467 BTU/h
Redundant Power Supplies	Yes, Hot swappable
Environment	
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-31–158°F (-35–70°C)
Humidity	20–90% non-condensing
Operating Altitude	Up to 7,400 ft (2,250 m)
Compliance	
	FCC Part 15 Class A, C-Tick, VCCI, CE, UL/cUL, CB
Certifications	
	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN

Note: All performance values are "up to" and vary depending on system configuration. IPsec VPN performance is based on 512 byte UDP packets using AES-256+SHA1. 1. IPS performance is measured using 1 Mbyte HTTP and Enterprise Traffic Mix. 2. SSL Inspection is measured with IPS enabled and HTTP traffic, using TLS v1.2 with AES256-SHA. 3. Application Control performance is measured with 64 Kbytes HTTP traffic. 4. NGFW performance is measured with IPS and Application Control enabled, based on Enterprise Traffic Mix. 5. Threat Protection performance is measured with IPS and Application Control and Malware protection enabled, based on Enterprise Traffic Mix. 6. CAPWAP performance is based on 1444 byte UDP packets. LAG support and redundant interfaces are limited to certain port configurations, please refer to technical documentation.

For complete, up-to-date and detailed feature set, please refer to the Administration Handbook and FortiOS Datasheet.

ORDER INFORMATION

Product	SKU	Description
FortiGate 2000E	FG-2000E	6x 10 GE SFP+ slots, 34x GE RJ45 ports (including 32x ports, 2x management/HA ports), FortiASIC NP6 and CP9 hardware accelerated, 480 GB SSD onboard storage.
Optional Accessories		
10 GE SFP+ transceiver module, short range	FG-TRAN-SFP+SR	10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ transceiver module, long range	FG-TRAN-SFP+LR	10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ active direct attach cable, 10m / 32.8 ft	SP-CABLE-ADASFP+	10 GE SFP+ active direct attach cable, 10m / 32.8 ft for all systems with SFP+ and SFP/SFP+ slots.
Rack mount sliding rails	SP-FG3040B-RAIL	Rack mount sliding rails for FG-1000C/-DC, FG-1200D, FG-1500D/-DC, FG-2000E, FG-2500E, FG-3040B/-DC, FG-3140B/-DC, FG-3240C/-DC, FG-3000D/-DC, FG-3100D/-DC, FG-3200D/-DC, FG-3700D/-DC, FG-3700DX, FG-3810D/-DC, FG-3815D/-DC and FG-3950B/-DC.
AC power supply	SP-FG2000E-PS	AC power supply for FG-2000E and FG-2500E.



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