

# FortiGate 600E Series

FG-600E and FG-601E



### **Highlights**

#### **Gartner Magic Quadrant**

**Leader** for both Network Firewalls and WAN Edge Infrastructure.

# Security-Driven

**Networking** FortiOS delivers converged networking and security.

#### State-of-the-Art Unparalleled Performance

with Fortinet's patented / SPU / vSPU processors.

#### **Enterprise Security**

with consolidated AI / ML-powered FortiGuard Services.

#### **Deep Visibility**

into applications, users, and devices beyond traditional firewall techniques.

# AI/ML Security and Deep Visibility

The FortiGate 600E Series NGFW combines Al-powered security and machine learning to deliver Threat Protection at any scale. Get deeper visibility into your network and see applications, users, and devices before they become threats.

Powered by a rich set of AI/ML security capabilities that extend into an integrated security fabric platform, the FortiGate 600E Series delivers secure networking that is broad, deep, and automated. Secure your network end to end with advanced edge protection that includes web, content, and device security, while network segmentation and secure SD-WAN reduce complexity and risk in hybrid IT networks.

Universal ZTNA automatically controls, verifies, and facilitates user access to applications, reducing lateral threats by providing access only to validated users. Ultra-fast Threat Protection and SSL Inspection provides security at the edge you can see without impacting performance.

IPS	NGFW	Threat Protection	Interfaces
10 Gbps	9.5 Gbps	7 Gbps	Multiple GE RJ45, GE SFP, and 10 GE SFP+ Slots



Available in



**Appliance** 



Virtual





Cloud



# **FortiOS Everywhere**

#### FortiOS, Fortinet's advanced operating system

FortiOS enables the convergence of high performing networking and security across the Fortinet Security Fabric. Because it can be deployed anywhere, it delivers consistent and context-aware security posture across network, endpoint, and multi-cloud environments.

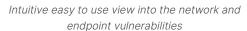
FortiOS powers all FortiGate deployments whether a physical or virtual device, as a container, or as a cloud service. This universal deployment model enables the consolidation of many technologies and use cases into a simplified, single policy and management framework. Its organically built best-of-breed capabilities, unified operating system, and ultra-scalability allows organizations to protect all edges, simplify operations, and run their business without compromising performance or protection.

FortiOS dramatically expands the Fortinet Security Fabric's ability to deliver advanced AI/ML-powered services, inline advanced sandbox detection, integrated ZTNA enforcement, and more, provides protection across hybrid deployment models for hardware, software, and Software-as-a-Service with SASE.

FortiOS expands visibility and control, ensures the consistent deployment and enforcement of security policies, and enables centralized management across large-scale networks with the following key attributes:

- Interactive drill-down and topology viewers that display real-time status
- On-click remediation that provides accurate and quick protection against threats and abuses
- Unique threat score system correlates weighted threats with users to prioritize investigations







Visibility with FOS Application Signatures

#### **FortiConverter Migration Service**

FortiConverter Service provides hassle-free migration to help organizations transition from a wide range of legacy firewalls to FortiGate Next-Generation Firewalls quickly and easily. The service eliminates errors and redundancy by employing best practices with advanced methodologies and automated processes. Organizations can accelerate their network protection with the latest FortiOS technology.





#### **FortiGuard Services**

#### FortiGuard AI-Powered Security

FortiGuard's rich suite of security services counter threats in real time using Al-powered, coordinated protection designed by FortiGuard Labs security threat researchers, engineers, and forensic specialists.

#### **Web Security**

Advanced cloud-delivered URL, DNS (Domain Name System), and Video Filtering providing complete protection for phishing and other web born attacks while meeting compliance.

Additionally, its dynamic inline CASB (Cloud Access Security Broker) service is focused on securing business SaaS data, while inline ZTNA traffic inspection and ZTNA posture check provide per-sessions access control to applications. It also integrates with the FortiClient Fabric Agent to extend protection to remote and mobile users.

#### **Content Security**

Advanced content security technologies enable the detection and prevention of known and unknown threats and file-based attack tactics in real-time. With capabilities like CPRL (Compact Pattern Recognition Language), AV, inline Sandbox, and lateral movement protection make it a complete solution to address ransomware, malware, and credential-based attacks.

#### **Device Security**

Advanced security technologies are optimized to monitor and protect IT, IIoT, and OT (Operational Technology) devices against vulnerability and device-based attack tactics. Its validated near-real-time IPS intelligence detects, and blocks known and zero-day threats, provides deep visibility and control into ICS/OT/SCADA protocols, and provides automated discovery, segmentation, and pattern identification-based policies.

#### Advanced Tools for SOC/NOC

Advanced NOC and SOC management tools attached to your NGFW provide simplified and faster time-to-activation.

#### SOC-as-a-Service

Includes tier-one hunting and automation, log location, 24×7 SOC analyst experts, managed firewall and endpoint functions, and alert triage.

#### **Fabric Rating Security Best Practices**

Includes supply chain virtual patching, up-to-date risk and vulnerability data to deliver quicker business decisions, and remediation for data breach situations.



# **Secure Any Edge at Any Scale**



#### Powered by Security Processing Unit (SPU)

Traditional firewalls cannot protect against today's content- and connection-based threats because they rely on off-the-shelf hardware and general-purpose CPUs, causing a dangerous performance gap. Fortinet's custom SPU processors deliver the power you need—up to 520Gbps—to detect emerging threats and block malicious content while ensuring your network security solution does not become a performance bottleneck.

#### **ASIC Advantage**



#### Network Processor 6 NP6

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

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



#### Content Processor 9 CP9

Content Processors act as co-processors to offload resource-intensive processing of security functions. The ninth generation of the Fortinet Content Processor, the CP9, accelerates resource-intensive SSL (including TLS 1.3) decryption and security functions while delivering:

- Pattern matching acceleration and fast inspection of real-time traffic for application identification
- IPS pre-scan/pre-match, signature correlation offload, and accelerated antivirus processing



#### **FortiCare Services**

Fortinet is dedicated to helping our customers succeed, and every year FortiCare Services help thousands of organizations get the most from our Fortinet Security Fabric solution. Our lifecycle portfolio offers Design, Deploy, Operate, Optimize, and Evolve services. Operate services offer device-level FortiCare Elite service with enhanced SLAs to meet our customer's operational and availability needs. In addition, our customized account-level services provide rapid incident resolution and offer proactive care to maximize the security and performance of Fortinet deployments.



#### **Use Cases**



#### **Next Generation Firewall (NGFW)**

- FortiGuard Labs' suite of Al-powered Security Services—natively integrated with your NGFW—secures web, content, and devices and protects networks from ransomware and sophisticated cyberattacks
- Real-time SSL inspection (including TLS 1.3) provides full visibility into users, devices, and applications across the attack surface
- Fortinet's patented SPU (Security Processing Unit) technology provides industry-leading high-performance protection



#### Secure SD-WAN

- FortiGate WAN Edge powered by one OS and unified security and management framework and systems transforms and secures WANs
- Delivers superior quality of experience and effective security posture for work-from-any where models, SD-Branch, and cloud-first WAN use cases
- Achieve operational efficiencies at any scale through automation, deep analytics, and self-healing



#### **Universal ZTNA**

- Control access to applications no matter where the user is and no matter where the application is hosted for universal application of access policies
- Provide extensive authentications, checks, and enforce policy prior to granting application access—every time
- Agent-based access with FortiClient or agentless access via proxy portal for guest or BYOD



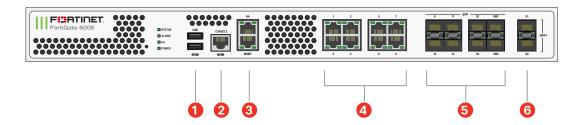
#### Segmentation

- Dynamic segmentation adapts to any network topology to deliver true end-to-end security—from the branch to the datacenter and across multi-cloud environments
- Ultra-scalable, low latency, VXLAN segmentation bridges physical and virtual domains with Layer 4 firewall rules
- Prevents lateral movement across the network with advanced, coordinated protection from FortiGuard Security Services detects and prevents known, zero-day, and unknown attacks



## Hardware

#### FortiGate 600E Series





#### Interfaces

- 1. 2 x USB Ports
- 2. 1 x Console Port
- 3. 2 x GE RJ45 MGMT/HA Ports
- 4. 8 x GE RJ45 Ports
- 5. 8 x GE SFP Slots
- 6. 2 × 10 GE SFP+ Slots

#### **Hardware Features**





# **Specifications**

	FG-600E FG-601E			
Interfaces and Modules	FG-601E			
Hardware Accelerated 10 GE SFP+ Slots	2			
Hardware Accelerated GE RJ45	8			
Interfaces				
Hardware Accelerated GE SFP Slots	8			
GE RJ45 Management Ports	2			
USB Ports	2			
RJ45 Console Port	1			
Onboard Storage	0 2× 240 GB SSD			
Included Transceivers	2x SFP (SX 1 GE)			
System Performance — Enterprise Traffic Mix				
IPS Throughput <sup>2</sup>	10 Gbps			
NGFW Throughput 2,4	9.5 Gbps			
Threat Protection Throughput 2,5	7 Gbps			
System Performance and Capacity				
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)	36 / 36 / 27 Gbps			
IPv6 Firewall Throughput (1518 / 512 / 64 byte, UDP)	36 / 36 / 27 Gbps			
Firewall Latency (64 byte, UDP)	1.54 µs			
Firewall Throughput (Packet per Second)	40.5 Mpps			
Concurrent Sessions (TCP)	8 Million			
New Sessions/Second (TCP)	450 000			
Firewall Policies	10 000			
IPsec VPN Throughput (512 byte) <sup>1</sup>	20 Gbps			
Gateway-to-Gateway IPsec VPN Tunnels	2000			
Client-to-Gateway IPsec VPN Tunnels	50 000			
SSL-VPN Throughput	7 Gbps			
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)	10 000			
SSL Inspection Throughput (IPS, avg. HTTPS) <sup>3</sup>	8 Gbps			
SSL Inspection CPS (IPS, avg. HTTPS) <sup>3</sup>	5500			
SSL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>	800 000			
Application Control Throughput (HTTP 64K) <sup>2</sup>	15 Gbps			
CAPWAP Throughput (HTTP 64K)	18 Gbps			
Virtual Domains (Default / Maximum)	10 / 10			
Maximum Number of FortiSwitches Supported	96			
Maximum Number of FortiAPs (Total / Tunnel)	1024 / 512			
Maximum Number of FortiTokens	5000			
High Availability Configurations	Active-Active, Active-Passive, Clustering			

	FG-600E	FG-601E		
Dimensions and Power				
Height x Width x Length (inches)	1.75 × 17.0 × 15.0			
Height x Width x Length (mm)	44.45 × 432 × 380			
Weight	16.1 lbs (7.3 kg)	16.6 lbs (7.5 kg)		
Form Factor	Rack Mount, 1 RU			
Power Source	100-240V, 50/60 Hz			
Power Consumption (Average / Maximum)	129 W / 244 W			
Current (Maximum)	6A@100V			
Heat Dissipation	832 BTU/h			
Redundant Power Supplies (Hot Swappable)	Optional			
Power Supply Efficiency Rating	80Plus Compliant			
Operating Environment and Certifications				
Operating Temperature	32°-104°F (0°-40°C)			
Storage Temperature	-31°-158°F (-35°-70°C)			
Humidity	10%-90% non-condensing			
Noise Level	59 dBA			
Forced Airflow	Side and Front to Back			
Operating Altitude	Up to 9843 ft (3000 m)			
Compliance	FCC Part 15 Class A, RCM, VCCI, CE, UL/cUL, CB			
Certifications	USGv6/IPv6			

Note: All performance values are "up to" and vary depending on system configuration.



 $<sup>^{\</sup>mbox{\tiny 1}}$  IPsec VPN performance test uses AES256-SHA256.

 $<sup>^{\</sup>rm 2}$  IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.

 $<sup>^{\</sup>mbox{\scriptsize 3}}$  SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

 $<sup>^{\</sup>rm 4}$  NGFW performance is measured with Firewall, IPS and Application Control enabled.

<sup>5</sup> Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

# **Ordering Information**

Product	SKU	Description
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FortiGate 600E	FG-600E	$2\times$ 10 GE SFP+ slots, 10x GE RJ45 ports (including 1x MGMT port, 1x HA port, 8x switch ports), 8x GE SFP slots, SPU NP6 and CP9 hardware accelerated.
FortiGate 601E	FG-601E	$2\times$ 10 GE SFP+ slots, 10x GE RJ45 ports (including 1x MGMT port, 1x HA port, 8x switch ports), 8x GE SFP slots, SPU NP6 and CP9 hardware accelerated, $2\times$ 240 GB onboard SSD storage.
Optional Accessories		
1 GE SFP LX Transceiver Module	FN-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP RJ45 Transceiver Module	FN-TRAN-GC	1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+slots.
1 GE SFP SX Transceiver Module	FN-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.
10 GE SFP+ Transceiver Module, Short Range	FN-TRAN-SFP+SR	10 GE SFP+ transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Transceiver Module, Long Range	FN-TRAN-SFP+LR	10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Transceiver, Extended Range	FN-TRAN-SFP+ER	10 GE SFP+ transceiver module, extended range for all systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ RJ45 Transceiver Module	FN-TRAN-SFP+GC	10 GE SFP+ RJ45 transceiver module for systems with 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.
Optional Power Supply	SP-FG300E-PS	AC power supply for FG-300/301E, FG-400/401E, FG-500/501E, FG-600/601E, FAZ-200F/300F/800F and FMG-200F/300F.



## **Subscriptions**

		A-la-carte	Bundles		
Service Category	Service Offering		Enterprise Protection	Unified Threat Protection	Advanced Threat Protection
Security Services	FortiGuard IPS Service	•	•	•	•
	FortiGuard Anti-Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	•
	FortiGuard Web Security — URL and web content, Video and Secure DNS Filtering	•	•	•	
	FortiGuard Anti-Spam		•	•	
	FortiGuard IoT Detection Service	•	•		
	FortiGuard Industrial Security Service	•	•		
	FortiCloud Al-based Inline Sandbox Service <sup>1</sup>	•			
NOC Services	FortiGate Cloud (SMB Logging + Cloud Management)	•			
	FortiGuard Security Fabric Rating & Compliance Monitoring Service	•	•		
	FortiConverter Service	•	•		
	FortiGuard SD-WAN Underlay Bandwidth and Quality Monitoring Service	•			
SOC Services	FortiAnalyzer Cloud	•			
	FortiAnalyzer Cloud with SOCaaS	•			
Hardware and Software Support	FortiCare Essentials	•			
	FortiCare Premium	•	•	•	•
	FortiCare Elite	•			
Base Services	FortiGuard Application Control				
	FortiCloud ZTNA Inline CASB Service <sup>1</sup>				
	Internet Service (SaaS) DB Updates				
	GeoIP DB Updates	included with FortiCare Subscription			
	Device/OS Detection Signatures				
	Trusted Certificate DB Updates				
	DDNS (v4/v6) Service				

1. Available when running FortiOS 7.2  $\,$ 



#### **FortiGuard Bundles**

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 one of these FortiGuard Bundles.

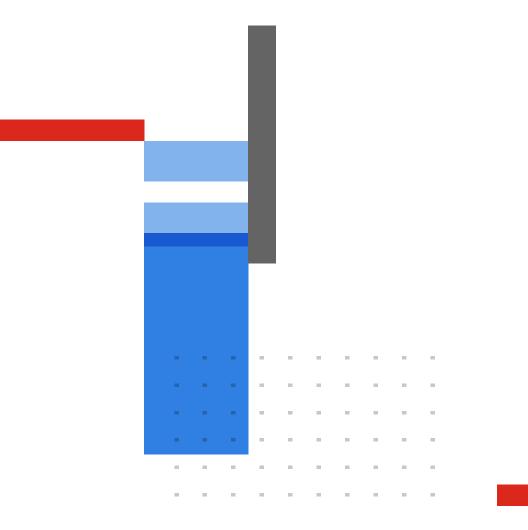
#### FortiCare Elite

FortiCare Elite services offers enhanced service-level agreements (SLAs) and accelerated issue resolution. This advanced support offering provides access to a dedicated support team. Single-touch ticket handling by the expert technical team streamlines resolution. This option also provides Extended End-of-Engineering-Support (EoE's) of 18 months for added flexibility and access to the new FortiCare Elite Portal. This intuitive portal provides a single unified view of device and security health.

#### **Fortinet CSR Policy**

Fortinet is committed to driving progress and sustainability for all through cybersecurity, with respect for human rights and ethical business practices, making possible a digital world you can always trust. You represent and warrant to Fortinet that you will not use Fortinet's products and services to engage in, or support in any way, violations or abuses of human rights, including those involving illegal censorship, surveillance, detention, or excessive use of force. Users of Fortinet products are required to comply with the Fortinet EULA and report any suspected violations of the EULA via the procedures outlined in the Fortinet Whistleblower Policy.







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