

# FortiGate 2200E Series

FG-2200E and FG-2201E



#### **Highlights**

### **Gartner Magic Quadrant**

**Leader** for both Network Firewalls and SD-WAN.

#### Security-Driven

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

### **Unparalleled Performance**

with Fortinet's patented / SPU / vSPU processors.

#### **Enterprise Security**

with consolidated AI / ML-powered FortiGuard Services.

#### **Hyperscale Security**

to secure any edge at any scale.

# **High Performance with Flexibility**

The FortiGate 2200E Series enables organizations to build security-driven networks that can weave security deep into their datacenter and across their hybrid IT architecture to protect any edge at any scale.

Powered by a rich set of AI/ML-based FortiGuard Services and an integrated security fabric platform, the FortiGate 2200E Series delivers coordinated, automated, end-to-end threat protection across all use cases.

The industry's first integrated Zero Trust Network Access (ZTNA) enforcement within an NGFW solution, FortiGate 2200E Series automatically controls, verifies, and facilitates user access to applications delivering consistent convergence with a seamless user experience.

IPS	NGFW	Threat Protection	Interfaces	
21.8 Gbps	13.5 Gbps	11 Gbps	Multiple GE RJ45, 25 GE SFP28 / 10 GE SFP+/	
			GE SFP, and 40 GE QSFP+ slots	



Available in



**Appliance** 



Virtual





Cloud



Container

# **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



Intuitive easy to use view into the network and endpoint vulnerabilities



Visibility with FOS Application Signatures

#### **FortiConverter 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**

#### **Network and File Security**

Services provide protection against network-based and file-based threats. This consists of Intrusion Prevention (IPS) which uses AI/M models to perform deep packet/SSL inspection to detect and stop malicious content, and apply virtual patching when a new vulnerability is discovered. It also includes Anti-Malware for defense against known and unknown file-based threats. Anti-malware services span both antivirus and file sandboxing to provide multi-layered protection and are enhanced in real-time with threat intelligence from FortiGuard Labs. Application Control enhances security compliance and offers real-time application visibility.

#### Web / DNS Security

Services provide protection against web-based threats including DNS-based threats, malicious URLs (including even in emails), and botnet/command and control communications. DNS filtering provides full visibility into DNS traffic while blocking high-risk domains, and protects against DNS tunneling, DNS infiltration, C2 server ID and Domain Generation Algorithms (DGA). URL filtering leverages a database of 300M+ URLs to identify and block links to malicious sites and payloads. IP Reputation and anti-botnet services prevent botnet communications, and block DDoS attacks from known sources.

#### SaaS and Data Security

Services address numerous security use cases across application usage as well as overall data security. This consists of Data Leak Prevention (DLP) which ensures data visibility, management and protection (including blocking exfiltration) across networks, clouds, and users, while simplifying compliance and privacy implementations. Separately, our Inline Cloud Access Security Broker (CASB) service protects data in motion, at rest, and in the cloud. The service enforces major compliance standards and manages account, user and cloud application usage. Services also include capabilities designed to continually assess your infrastructure, validate that configurations are working effectively and secure, and generate awareness of risks and vulnerabilities that could impact business operations. This includes coverage across IoT devices for both IoT detection and IoT vulnerability correlation.

#### **Zero-Day Threat Prevention**

Zero-day threat prevention entails Fortinet's Al-based inline malware prevention, our most advanced sandbox service, to analyze and block unknown files in real-time, offering subsecond protection against zero-day and sophisticated threats across all NGFWs. The service also has a built-in MITRE ATT&CK® matrix to accelerate investigations. The service focuses on comprehensive defense by blocking unknown threats while streamlining incident response efforts and reducing security overhead.

#### **OT Security**

The service provides OT detection, OT vulnerability correlation, virtual patching, OT signatures, and industry-specific protocol decoders for overall robust defense of OT environments and devices.



# **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 in line 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



#### 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



#### 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

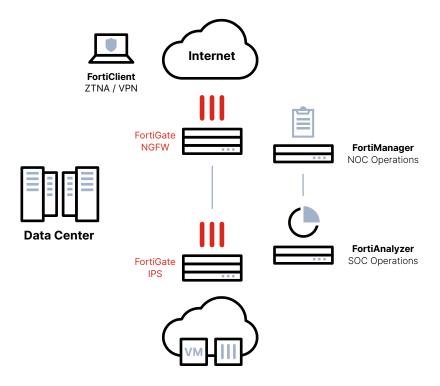




### Mobile Security for 4G, 5G, and IoT

- SPU-accelerated, high performance CGNAT and IPv6 migration options, including: NAT44, NAT444, NAT64/ DNS64, NAT46 for 4G Gi/sGi, and 5G N6 connectivity and security
- RAN Access Security with highly scalable and highest-performing IPsec aggregation and control Security Gateway (SecGW)
- User plane security enabled by full threat protection and visibility into GTP-U inspection

#### **Datacenter Deployment** (NGFW, IPS, Segmentation)

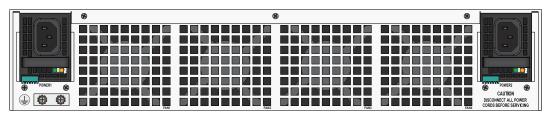




### **Hardware**

#### FortiGate 2200E Series

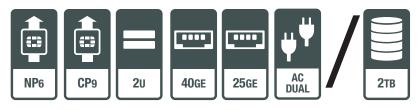




#### Interfaces

- 1. 1 x USB Port
- 2. 1 x Console Port
- 3. 2 x GE RJ45 Management Ports
- 4. 12 x GE RJ45 Ports
- 18 × 25 GE SFP28 /
  10 GE SFP+ / GE SFP Slots
- 6. 2 × 25 GE SFP28 / 10 GE SFP+ / GE SFP HA Slots
- 7.  $4 \times 40$  GE QSFP+ Slots

#### **Hardware Features**



#### **High-Speed Connectivity**

High-speed connectivity is essential for network security segmentation at the core of data networks. The FortiGate 2200E Series provides high speed interfaces, simplifying network designs without relying on additional devices to bridge desired connectivity.



# **Specifications**

	FORTIGATE 2200E FORTIGATE 2201E			
Interfaces and Modules				
Hardware Accelerated 40 GE QSFP+ Slots	4			
Hardware Accelerated 25 GE SFP28 / 10 GE SFP+ / GE SFP HA Slots	2			
Hardware Accelerated 25 GE SFP28 / 10 GE SFP+ / GE SFP Slots	18			
Hardware Accelerated GE RJ45 Ports	12			
GE RJ45 Management Ports	2			
USB Port	1			
Console Port	1			
Onboard Storage	0 2×1 TB SSD			
Included Transceivers	2x SFP+ (SR 10 GE)			
System Performance — Enterprise Traffic N	lix			
IPS Throughput <sup>2</sup>	21.8 Gbps			
NGFW Throughput <sup>2, 4</sup>	13.5 Gbps			
Threat Protection Throughput <sup>2, 5</sup>	11 Gbps			
System Performance and Capacity				
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)	158 / 155 / 100 Gbps			
IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP)	158 / 155 / 100 Gbps			
Firewall Latency (64 byte, UDP)	3.09 µs			
Firewall Throughput (Packet per Second)	150 Mpps			
Concurrent Sessions (TCP)	24 Million			
New Sessions/Second (TCP)	500 000			
Firewall Policies	100 000			
IPsec VPN Throughput (512 byte) 1	98 Gbps			
Gateway-to-Gateway IPsec VPN Tunnels	20 000			
Client-to-Gateway IPsec VPN Tunnels	100 000			
SSL-VPN Throughput	10 Gbps			
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)	30 000			
SSL Inspection Throughput (IPS, avg. HTTPS) <sup>3</sup>	17 Gbps			
SSL Inspection CPS (IPS, avg. HTTPS) <sup>3</sup>	9500			
SSL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>	2.5 Million			
Application Control Throughput (HTTP 64K) <sup>2</sup>	52 Gbps			
CAPWAP Throughput (HTTP 64K)	60 Gbps			
Virtual Domains (Default / Maximum)	10 / 500			
Maximum Number of FortiSwitches Supported	196			
Maximum Number of FortiAPs (Total / Tunnel)	4096 / 2048			
Maximum Number of FortiTokens	20 000			
High Availability Configurations	Active-Active, Active-Passive, Clustering			

	FORTIGATE 2200E	FORTIGATE 2201E		
Dimensions and Power				
Height x Width x Length (inches)	3.5 × 17.44 × 21.89			
Height x Width x Length (mm)	88.9 × 443 × 556			
Weight	40.0 lbs (18.2 kg)	41.4 lbs (18.8 kg)		
Form Factor	Rack Mount, 2 RU			
AC Power Supply	100-240V AC, 50/60 Hz			
Power Consumption (Average / Maximum)	408 W / 571 W	412 W / 577 W		
Current (Maximum)	12A@100V, 9A@240V			
Heat Dissipation	1948 BTU/h	1968 BTU/h		
Redundant Power Supplies (Hot Swappable)	Yes (Default dual AC PSU for 1+1 Redundancy)			
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	70 dBA			
Forced Airflow	Front to Back			
Operating Altitude	Up to 7400 ft (2250 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>lt;sup>1</sup> 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.

 $<sup>^{\</sup>rm 3}$  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			
FortiGate 2200E	FG-2200E	4× 40 GE QSFP+ slots, 20× 25 GE SFP28 slots (including 18x ports, 2x HA ports), 14x GE RJ45 ports (including 12x ports, 2x management ports), SPU NP6 and CP9 hardware accelerated, and dual AC power supplies.			
FortiGate 2201E	FG-2201E	$4\times$ 40 GE QSFP+ slots, 20× 25 GE SFP28 slots (including 18x ports, 2x HA ports), 14x GE RJ45 ports (including 12x ports, 2x management ports), SPU NP6 and CP9 hardware accelerated, and dual AC power supplies, with 2× 1 TB SSD onboard storage.			
Optional Accessories	SKU	Description			
10 GE SFP+ RJ45 Transceiver Module	FN-TRAN-SFP+GC	10 GE SFP+ RJ45 transceiver module for systems with 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 Module, 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+ 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.			
25 GE SFP28 Transceiver Module, Short Range	FN-TRAN-SFP28-SR	25 GE SFP28 transceiver module, short range for all systems with SFP28 slots.			
25 GE SFP28 Transceiver Module, Long Range	FG-TRAN-SFP28-LR	25 GE SFP28 transceiver module, long range for all systems with SFP28 slots			
40 GE QSFP+ Transceiver Module, Short Range	FN-TRAN-QSFP+SR	40 GE QSFP+ transceiver module, short range for all systems with QSFP+ slots.			
40 GE QSFP+ Transceivers, Short Range, BiDi	FG-TRAN-QSFP+SR-BIDI	40 GE QSFP+ transceivers, short range BiDi for systems with QSFP+ slots.			
40 GE QSFP+ Transceiver Module, Long Range	FN-TRAN-QSFP+LR	40 GE QSFP+ transceiver module, long range for all systems with QSFP+ slots.			
40 GE QSFP+ to 4× 10 GE SFP+ Optical Breakout	FG-TRAN-QSFP+4XSFP	40 GE QSFP+ Parallel Breakout Active Optical Cable with 1m length for all systems with QSFP+ slots.			
40 GE QSFP+ Passive Direct Attach Cable	SP-CABLE-FS-QSFP+(1/3/5)	40GE QSFP+ Passive Direct Attach Cable, (1/3/5 m) for Systems with QSFP+ slots.			
QSFP+ to 4xSFP+ Optical breakout 5m	FG-TRAN-QSFP+4SFP-5	40 G QSFP+ Parallel Breakout MPO to 4xLC connectors, 5m reach, transceivers not included.			
Rack Mount Sliding Rails	SP-FG3040B-RAIL	Rack mount sliding rails for FG-1000C/-DC, FG-1100/1101E, FG-1200D, FG-1500D/-DC, FG-2000E, FG-2200E/2201E, FG-2500E, FG-3040B/-DC, FG-3140B/-DC, FG-3240C/-DC, FG-3000D/-DC, FG-3100D/-DC, FG-3200D/-DC, FG-3300E/3301E, FG-3400/3401E, FG-3600/3601E, FG-3700D/-DC, FG-3700DX, FG-3810D/-DC and FG-3950B/-DC.			
AC Power Supply	SP-FG3800D-PS	AC power supply for FG-2200/2201E, FG-3300/3301E, FG-3400/3401E, FG-3600/3601E, FG-3700D, FG-3700D-NEBS, FG-3700DX, FG-3810D and FG-3815D.			



# **Subscriptions**

		A-la-carte	Bundles			
Service Category	Service Offering		Enterprise Protection	Unified Threat Protection	Advanced Threat Protection	
FortiGuard Security Services	IPS Service	•	•	•	•	
	Anti-Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	•	
	URL, DNS & Video Filtering Service	•	•	•		
	Anti-Spam		•	•		
	Al-based Inline Malware Prevention Service	•	•			
	Data Loss Prevention Service <sup>1</sup>	•	•			
	OT Security Service (OT Detection, OT Vulnerability correlation, Virtual Patching, OT Signature / Protocol Decoders) 1	•				
	Application Control		included with FortiCare Subscription			
	CASB SaaS Control		included with FortiCare Subscription			
SD-WAN and SASE Services	SD-WAN Underlay Bandwidth and Quality Monitoring Service	•				
Gervices	SD-WAN Overlay-as-a-Service for SaaS-based overlay network provisioning	•				
	SD-WAN Connector for FortiSASE Secure Private Access	•				
	FortiSASE subscription including cloud management and 10Mbps bandwidth license <sup>2</sup>	•				
NOC and SOC Services	FortiGuard Attack Surface Security Service (IoT Detection, IoT Vulnerability Correlation, and Security Rating Updates) <sup>1</sup>	•	•			
	FortiConverter Service	•	•			
	Managed FortiGate Service	•				
	FortiGate Cloud (SMB Logging + Cloud Management)	•				
	FortiAnalyzer Cloud	•				
	FortiAnalyzer Cloud with SOCaaS	•				
	FortiGuard SOCaaS	•				
Hardware and	FortiCare Essentials	•				
Software Support	FortiCare Premium	•	•	•	•	
	FortiCare Elite	•				
Base Services	Internet Service (SaaS) DB Updates					
	GeoIP DB Updates		included with For	tiCare Subscription		
	Device/OS Detection Signatures			,		
	Trusted Certificate DB Updates					
	DDNS (v4/v6) Service					

<sup>1.</sup> Full features available when running FortiOS 7.4.1 2. Desktop Models only





#### **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.

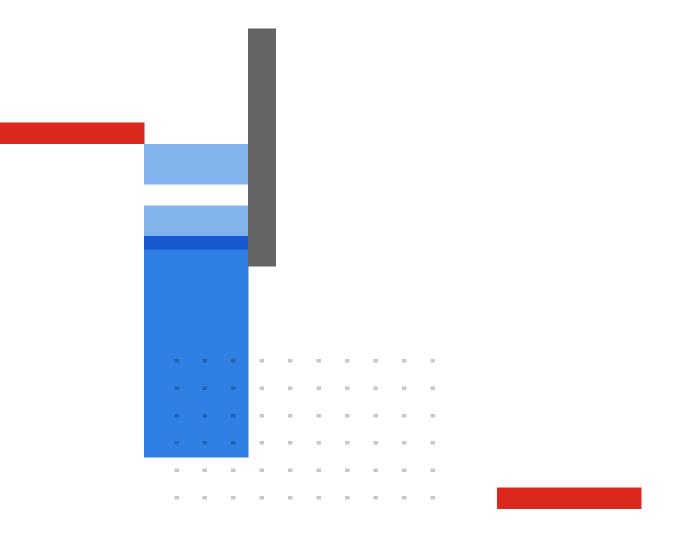
#### **FortiCare Elite**

FortiCare Elite offers enhanced SLAs and quick issue resolution through a dedicated support team. It provides single-touch ticket handling, extended Extended End-of-Engineering-Support for 18 months, and access to the new FortiCare Elite Portal for a 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.





www.fortinet.com

Copyright © 2023 Fortinet, Inc. All rights reserved. Fortinet\*, FortiGate\*, FortiCare\* and FortiGate\*, and certain other marks are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet, and Fortinetials, whether express or implied, except to the extent Fortinet enteres a binding written contract, sipand by Fortinetia Counsel, with a purchaser that expressly warrants that the identified product will perform according to certain expressly-identified performance metrics and, in such event, only the specific performance metrics expressly identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinets internal lab tests. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.