

## FortiGate 120G Series



## **Highlights**

Gartner® Magic
Quadrant™ Leaders for
both Network Firewalls and
WAN Edge Infrastructure

Secure Networking with FortiOS for converged networking and security

State-of-the-art unparalleled performance with Fortinet's patented SPU and vSPU processors

Enterprise security
with consolidated AI/
ML-powered FortiGuard
services

Deep visibility into applications, users, and devices beyond traditional firewall techniques

## **Artificial Intelligence, Machine Learning Security with Deep Visibility**

The FortiGate 120G series next-generation firewall (NGFW) combines artificial intelligence (AI)-powered security and machine learning (ML) 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 Fortinet ASIC technology, the 120G series delivers industry-leading threat detection capabilities, allowing for faster identification and mitigation of cyberthreats. Powered by a rich set of AI/ML security capabilities that extend into an integrated Security Fabric platform, the FortiGate 120G 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 zero-trust network access (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
5.3 Gbps	3.1 Gbps	2.8 Gbps	Multiple GE RJ45, SFP, and 10GE SFP+ Slots Variants with internal storage

## **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, malware, zero days, and sophisticated Al-powered 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 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 hybrid working models, SD-Branch, and cloud-first WAN use cases
- Achieve operational efficiencies at any scale through automation, deep analytics, and selfhealing

#### **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





## **FortiGuard Al-Powered Security Services**

FortiGuard Al-Powered Security Services is part of Fortinet's layered defense and tightly integrated into our FortiGate NGFWs and other products. Infused with the latest threat intelligence from FortiGuard Labs, these services protect organizations against modern attack vectors and threats, including zero-day and sophisticated Al-powered attacks.

## Network and file security

Network and file security services protect against network and file-based threats. With over 18,000 signatures, our industry-leading intrusion prevention system (IPS) uses AI/ML models for deep packet/SSL inspection, detecting and blocking malicious content, and applying virtual patches for newly discovered vulnerabilities. Anti-malware protection defends against both known and unknown file-based threats, combining antivirus and sandboxing for multi-layered security. Application control improves security compliance and provides real-time visibility into applications and usage.

## Web/DNS security

Web/DNS security services protect against DNS-based attacks, malicious URLs (including those in emails), and botnet communications. DNS filtering blocks the full spectrum of DNS-based attacks while URL filtering uses a database of over 300 million URLs to identify and block malicious links. Meanwhile, IP reputation and anti-botnet services guard against botnet activity and DDoS attacks. FortiGuard Labs blocks over 500 million malicious/phishing/ spam URLs weekly, and blocks 32,000 botnet command-and-control attempts every minute, demonstrating the robust protection offered through Fortinet.

## SaaS and data security

SaaS and data security services cover key security needs for application use and data protection. This includes data loss prevention to ensure visibility, management, and protection (blocking exfiltration) of data in motion across networks, clouds, and users. Our inline cloud access security broker service protects data in motion, at rest, and in the cloud, enforcing compliance standards and managing account, user, and cloud app usage. Services also assess infrastructure, validate configurations, and highlight risks and vulnerabilities, including IoT device detection and vulnerability correlation.

#### Zero-Day threat prevention

Zero-day threat prevention is achieved through Al-powered inline malware prevention to analyze file content to identify and block unknown malware in real time, delivering sub-second protection across all NGFWs. The service also integrates the MITRE ATT&CK matrix to speed up investigations. Integrated into FortiGate NGFWs, the service provides comprehensive defense by blocking unknown threats, streamlining incident response, and reducing security overhead.

#### **OT** security

With over 1000 virtual patches, 1100+ OT applications, and 3300+ protocol rules, integrated OT security capabilities detect threats targeting OT infrastructure, perform vulnerability correlation, apply virtual patching, and utilize industry-specific protocol decoders for robust defense of OT environments and devices.





Available in



**Appliance** 



Virtua



Hosted



Cloud



Container

## **FortiOS Everywhere**

## FortiOS, Fortinet's Real-Time Network Security Operating System

FortiOS is the operating system that powers Fortinet Security Fabric platform, enabling enforcement of security policies and holistic visibility across the entire attack surface. FortiOS provides a unified framework for managing and securing networks, cloud-based, hybrid, or a convergence of IT, OT, and IoT. FortiOS enables seamless and efficient interoperation across Fortinet products with consistent and consolidated Al-powered protection across today's hybrid environments.

Unlike traditional point solutions, Fortinet adopts a holistic approach to cybersecurity, aiming to reduce complexities, eliminate security silos, and improve operational efficiencies. By consolidating security functions into a single platform, FortiOS simplifies management, reduces costs, and enhances overall security posture. Together, FortiGate and FortiOS create intelligent, adaptive protection to help organizations reduce complexity, eliminate security silos, and optimize user experience.

By integrating generative AI (GenAI), FortiOS further enhances the ability to analyze network traffic and threat intelligence, detects deviations or anomalies more effectively, and provides more precise remediation recommendations, ensuring minimum performance impact without compromising security.

Learn more about what's new in FortiOS. <a href="https://www.fortinet.com/products/fortigate/fortios">https://www.fortinet.com/products/fortigate/fortios</a>



Intuitive easy to use view into the network and endpoint vulnerabilities



Comprehensive view of network performance, security, and system status

## Fortinet ASICs: Unrivaled Security, Unprecedented Performance

# ASIC

## Powered by the only purpose-built SPU

Traditional firewalls cannot protect against today's content and connection-based threats because they rely on off-the-shelf general-purpose central processing units (CPUs), leaving a dangerous security gap. Fortinet's custom SPUs deliver the power you need to radically increase speed, scale, and efficiency while greatly improving user experience and reducing footprint and power requirements. Fortinet's SPUs deliver up to 520 Gbps of protected throughput to detect emerging threats and block malicious content while ensuring your network security solution does not become a performance bottleneck.

Fortinet ASICs are designed to be energy-efficient, leading to lower power consumption and improved TCO. They deliver industry-leading throughput, handle more traffic and perform security inspections faster, reduce latency for quicker packet processing and minimize network delays.

Fortinet SPUs are designed with integrated security functions like zero trust, SSL, IPS, and VXLAN to name but a few, dramatically improving the performance of these functions that competitors traditionally implement in software.

#### Secure SD-WAN ASIC SP5

- Combines a RISC-based CPU with Fortinet's proprietary security processing unit (SPU) content and network processors for unmatched performance
- Delivers the industry's fastest application identification and steering for efficient business operations
- Accelerates IPsec VPN performance for the best user experience on direct internet access
- Enables best-of-breed NGFW security and deep SSL inspection with high performance
- Extends security to access layer to enable SD-Branch transformation with accelerated and integrated switch and access point connectivity



## **FortiManager**



### Centralized management at scale for distributed enterprises

FortiManager, powered by FortiAI, is a centralized management solution for the Fortinet Security Fabric. It streamlines mass provisioning and policy management for FortiGate, FortiGate VM, cloud security, SD-WAN, SD-Branch, FortiSASE, and ZTNA in hybrid environments. Additionally, FortiManager provides real-time monitoring of the entire managed infrastructure and automates network operation workflows. Leveraging GenAI in FortiAI, it further enhances Day 0–1 configurations and provisioning, and Day N troubleshooting and maintenance, unlocking the full potential of the Fortinet Security Fabric and significantly boosting operational efficiency.



GenAl in FortiManager helps manage networks effortlessly—generates configuration and policy scripts, troubleshoots issues, and executes recommended actions.

## **FortiConverter Service**





The FortiConverter Service provides hassle-free migration to help organizations transition quickly and easily from a wide range of legacy firewalls to FortiGate NGFWs. 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.

## **FortiCare Services**



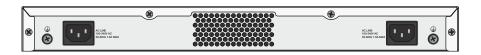
#### Expertise at your service

Fortinet prioritizes customer success through FortiCare Services, optimizing the Fortinet Security Fabric solution. Our comprehensive life-cycle services include Design, Deploy, Operate, Optimize, and Evolve. The FortiCare Elite, one of the service offerings, provides heightened SLAs and swift issue resolution with a dedicated support team. This advanced support option includes an extended end-of-engineering support of 18 months, providing flexibility and access to the intuitive FortiCare Elite portal for a unified view of device and security health, streamlining operational efficiency and maximizing Fortinet deployment performance.



## **Hardware**

## FortiGate 120G/121G Series





#### Interfaces

- 1. 1x RJ45 Console Port
- 2. 2x RJ45 HA and Management Ports
- 3. 16x GE RJ45 Ports
- 4. 4× 10GE SFP+ FortiLink Slots
- 5. 8x SFP Ports

#### **Hardware Features**



## **Trusted Platform Module (TPM)**



The FortiGate 120G series features a dedicated module that hardens physical networking appliances by generating, storing, and authenticating cryptographic keys. Hardware-based security mechanisms protect against malicious software and phishing attacks.

## **Dual power supply**



Power supply redundancy is essential in the operation of mission-critical networks. The FortiGate 120G series offers dual built-in non-hot swappable power supplies.

## **Access layer security**



FortiLink protocol enables you to converge security and network access by integrating the FortiSwitch into the FortiGate as a logical extension of the firewall. These FortiLink-enabled ports can be reconfigured as regular ports as needed.



## **Specifications**

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Hardware Specifications	TORTIONE 1200			
Hardware Accelerated GE RJ45 Ports	16			
Hardware Accelerated GE RJ45 Management / HA Ports	2			
Hardware Accelerated GE SFP Slots	8			
Hardware Accelerated 10 GE SFP+ FortiLink Slots (default)	4			
USB Ports	1			
Console (RJ45) Port	1			
Internal Storage	— 1 × 480 GB SSD			
Trusted Platform Module (TPM)	$\odot$			
Bluetooth Low Energy (BLE)	$\odot$			
Signed Firmware Hardware Switch	_			
System Performance* — Enterprise Traffi	ic Mix			
IPS Throughput <sup>2</sup>	5.3 Gbps			
NGFW Throughput <sup>2, 4</sup>	3.1 Gbps			
Threat Protection Throughput 2,5	2.8 Gbps			
System Performance and Capacity				
Firewall Throughput (1518 / 512 / 64 byte UDP packets)	39 / 39 / 28 Gbps			
Firewall Latency (64 byte UDP packets)	3.17 µs			
Firewall Throughput (Packets Per Second)	42 Mpps			
Concurrent Sessions (TCP)	3 M			
New Sessions/Second (TCP)	140 000			
Firewall Policies	10 000			
IPsec VPN Throughput (512 byte) <sup>1</sup>	35 Gbps			
Gateway-to-Gateway IPsec VPN Tunnels	2000			
Client-to-Gateway IPsec VPN Tunnels	16 000			
SSL-VPN Throughput	1.5 Gbps			
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)	500			
SSL Inspection Throughput (IPS, avg. HTTPS) 3	3 Gbps			
SSL Inspection CPS (IPS, avg. HTTPS) $^{\rm 3}$	2100			
SSL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>	315 000			
Application Control Throughput (HTTP 64K) <sup>2</sup>	6.7 Gbps			
CAPWAP Throughput (HTTP 64K)	35 Gbps			
Virtual Domains (Default / Maximum)	10 / 10			
Maximum Number of FortiSwitches Supported	48*			
Maximum Number of FortiAPs (Total / Tunnel Mode)	128 / 64			
Maximum Number of FortiTokens	5000			
High Availability Configurations	Active-Active, Active-Passive, Clustering			

	FORTIGATE 120G	FORTIGATE 121G			
Dimensions	PORTIONIE 1200	1 31(113)(1213)			
Height x Width x Length (inches)	1.73 ×	1.73 × 17 × 10			
Height x Width x Length (mm)	44 × 43	44 × 432 × 254			
Weight	12.17 lbs	12.17 lbs (5.52 kg)			
Form Factor (supports EIA/non-EIA standards)	Rack Mo	Rack Mount, 1RU			
Operating Environment and Certification	ns				
Input Rating	100-240VA	100-240VAC, 60-50Hz			
Power Supply Efficiency Rating	N	N/A			
Redundant Power Supplies	Yes (Default dual non-swappable AC PSU 1+1 Redundancy)				
Maximum Current	1.0A @100V, 0.5A @240V				
Power Consumption (Average / Maximum)	38 W / 40 W	43 W / 47 W			
Heat Dissipation	138 BTU/hr	159 BTU/h			
Operating Temperature	32°F to 104°F	32°F to 104°F (0°C to 40°C)			
Storage Temperature	-31°F to 158°F	-31°F to 158°F (-35°C to 70°C)			
Humidity	20% to 90% non- condensing	10% to 90% non- condensing			
Noise Level	49	49 dBA			
Air Flow	Side t	Side to back			
Operating Altitude	Up to 10 000	Up to 10 000 ft (3048 m)			
Compliance	,	FCC Part 15B, Class A, CE, RCM, VCCI, UL/cUL, CB, BSMI			
Certifications	USGv	USGv6/IPv6			

<sup>\*</sup> FortiOS 7.6.1+ is required for supporting up to 48 FSW. All prior releases support up to 32.

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>lt;sup>4</sup> 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.

## **Subscriptions**

			Bundles			
Service Category	Service Offering	A-la-carte	Enterprise Protection	Unified Threat Protection	Advanced Threat Protection	
FortiGuard Security Services	IPS — IPS, Malicious/Botnet URLs	•	•	•	•	
	Anti-Malware Protection (AMP)—AV, Botnet Domains, Mobile Malware, Virus Outbreak Protection, Content Disarm and Reconstruct <sup>3</sup> , Al-based Heurestic AV, FortiGate Cloud Sandbox	•	•	•	•	
	URL, DNS and Video Filtering — URL, DNS and Video <sup>3</sup> Filtering, Malicious Certificate	•	•	•		
	Anti-Spam		•	•		
	Al-based Inline Malware Prevention <sup>3</sup>	•	•			
	Data Loss Prevention (DLP) 1	•	•			
	Attack Surface Security — IoT Device Detection, IoT Vulnerability Correlation and Virtual Patching, Security Rating, Outbreak Check	•	•			
	OT Security—OT Device Detection, OT vulnerability correlation and Virtual Patching, OT Application Control and IPS <sup>1</sup>	•				
	Application Control		included with FortiCare Subscription			
	Inline CASB <sup>3</sup>		included with FortiCare Subscription			
SD-WAN and SASE Services	SD-WAN Underlay Bandwidth and Quality Monitoring	•				
	SD-WAN Overlay-as-a-Service	•				
	SD-WAN Connector for FortiSASE Secure Private Access	•				
	SASE connector for FortiSASE Secure Edge Management (with 10Mbps Bandwidth) <sup>2</sup>	•				
NOC and SOC Services	FortiConverter Service for one time configuration conversion	•	•			
	Managed FortiGate Service—available 24×7, with Fortinet NOC experts performing device setup, network, and policy change management	•				
	FortiGate Cloud—Management, Analysis, and One Year Log Retention	•				
	FortiManager Cloud	•				
	FortiAnalyzer Cloud	•				
	FortiGuard SOCaaS—24×7 cloud-based managed log monitoring, incident triage, and SOC escalation service	•				
Hardware and Software Support	FortiCare Essentials <sup>2</sup>	•				
	FortiCare Premium	•	•	•	•	
	FortiCare Elite	•				
Base Services	Device/OS Detection, GeoIPs, Trusted CA Certificates, Internet Services and Botnet IPs, DDNS (v4/v6), Local Protection, PSIRT Check, Anti-Phishing		included with Fort	iCare Subscription		

- 1. Full features available when running FortiOS 7.4.1.
- 2. Desktop Models only.
- 3. Not available for FortiGate/FortiWiFi 40F, 60E, 60F, 80E, and 90E series from 7.4.4 onwards.



## **FortiGuard Bundles**

FortiGuard Al-Powered Security Bundles provide a comprehensive and meticulously curated selection of security services to combat known, unknown, zero-day, and emerging Al-based threats. These services are designed to prevent malicious content from breaching your defenses, protect against web-based threats, secure devices throughout IT/OT/IoT environments, and ensure the safety of applications, users, and data. All bundles include FortiCare Premium Services featuring 24×7×365 availability, one-hour response for critical issues, and next-business-day response for noncritical matters.



## **Ordering Information**

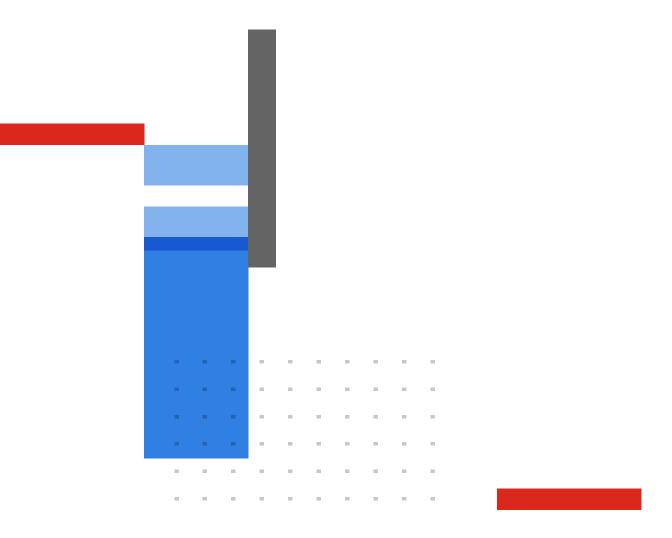
Product	SKU	Description
FortiGate 120G	FG-120G	18x GE RJ45 ports (including 1x MGMT port, 1x HA port, 16x switch ports), 8x GE SFP slots, $4\times$ 10GE SFP+ slots, SP5 hardware accelerated, dual AC power supplies.
FortiGate 121G	FG-121G	18x GE RJ45 ports (including 1x MGMT port, 1x HA port, 16x switch ports), 8x GE SFP slots, $4\times$ 10GE SFP+ slots, SP5 hardware accelerated, 480GB onboard SSD storage, dual AC power supplies.
Transceivers		
1 GE SFP SX Transceiver Module	FN-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.
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.
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, 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+ Transceiver Module, Short Range	FN-TRAN-SFP+SR	10GE SFP+ transceiver module, short range for systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Transceiver Module, 30km Long Range	FN-TRAN-SFP+BD27	10GE SFP+ transceiver module, 30km long range single BiDi for systems with SFP+ and SFP/SFP+ slots (connects to FN-TRAN-SFP+BD33, ordered separately).
10 GE SFP+ Transceiver Module, (connects to FN-TRAN-SFP+BD27, ordered separately)	FN-TRAN-SFP+BD33	10GE SFP+ transceiver module, 30km long range single BiDi for systems with SFP+ and SFP/SFP+ slots (connects to FN-TRAN-SFP+BD27, ordered separately).
Cables		
10 GE SFP+ Passive Direct Attach Cable 1m	FN-CABLE-SFP+1	10 GE SFP+ passive direct attach cable, 1m for systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Passive Direct Attach Cable 3m	FN-CABLE-SFP+3	10 GE SFP+ passive direct attach cable, 3m for systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Passive Direct Attach Cable 5m	FN-CABLE-SFP+5	10 GE SFP+ passive direct attach cable, 5m for systems with SFP+ and SFP/SFP+ slots.

Visit <a href="https://www.fortinet.com/resources/ordering-guides">https://www.fortinet.com/resources/ordering-guides</a> for related ordering guides.



## **Fortinet Corporate Social Responsibility 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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