

# FortiGate® 100F Series

FortiGate 100F and 101F

 Next Generation Firewall  
Secure SD-WAN  
Secure Web Gateway


The FortiGate 100F series delivers next generation firewall (NGFW) capabilities for mid-sized to large enterprises deployed at the campus or enterprise branch level. Protects against cyber threats with high-powered security processors for optimized network performance, security efficacy and deep visibility. Fortinet's Security-Driven Networking approach provides tight integration of the network to the new generation of security.

## Security

- Identifies thousands of applications inside network traffic for deep inspection and granular policy enforcement
- Protects against malware, exploits, and malicious websites in both encrypted and non-encrypted traffic
- Prevents and detects against known attacks using continuous threat intelligence from AI-powered FortiGuard Labs security services
- Proactively blocks unknown sophisticated attacks in real-time with the Fortinet Security Fabric integrated AI-powered FortiSandbox

## Performance

- Engineered for Innovation using Fortinet's purpose-built security processors (SPU) to deliver the industry's best threat protection performance and ultra-low latency
- Provides industry-leading performance and protection for SSL encrypted traffic including the first firewall vendor to provide TLS 1.3 deep inspection

## Certification

- Independently tested and validated best security effectiveness and performance
- Received unparalleled third-party certifications from NSS Labs, ICASA, Virus Bulletin, and AV Comparatives

## Networking

- Application aware routing with in-built SD-WAN capabilities to achieve consistent application performance and the best user experience
- Built-in advanced routing capabilities to deliver high performance with encrypted IPSEC tunnels at scale

## Management

- Includes a management console that is effective and simple to use, which provides a comprehensive network of automation & visibility
- Provides Zero Touch Provisioning leveraging Single Pane of Glass Management powered by the Fabric Management Center
- Predefined compliance checklists analyze the deployment and highlight best practices to improve the overall security posture

## Security Fabric

- Enables Fortinet and Fabric-ready partners' products to provide broader visibility, integrated end-to-end detection, threat intelligence sharing, and automated remediation
- Automatically builds Network Topology visualizations which discover IoT devices and provide complete visibility into Fortinet and Fabric-ready partner products

Firewall	IPS	NGFW	Threat Protection	Interfaces
20 Gbps	2.6 Gbps	1.6 Gbps	1 Gbps	Multiple GE RJ45, GE SFP and 10 GE SFP+ slots

## Deployment



### Next Generation Firewall (NGFW)

- Reduce the complexity and maximize your ROI by integrating threat protection security capabilities into a single high-performance network security appliance, powered by Fortinet's Security Processing Unit (SPU)
- Full visibility into users, devices, applications across the entire attack surface and consistent security policy enforcement irrespective of asset location
- Protect against network exploitable vulnerabilities with industry-validated IPS that offers low latency and optimized network performance
- Automatically block threats on decrypted traffic using the Industry's highest SSL inspection performance, including the latest TLS 1.3 standard with mandated ciphers
- Proactively block newly discovered sophisticated attacks in real-time with AI-powered FortiGuard Labs and advanced threat protection services included in the Fortinet Security Fabric



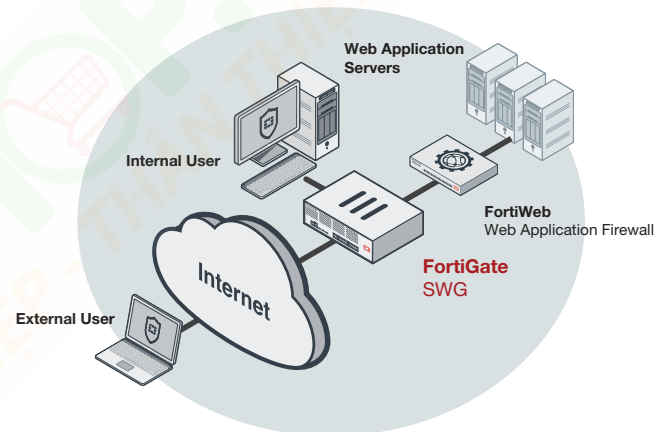
### Secure SD-WAN

- Consistent business application performance with accurate detection, dynamic WAN path steering and optimization
- Multi-cloud access for faster SaaS adoption with end-to-end optimization
- Simplification with zero touch deployment and centralized management with auto-provisioning, analytics and reporting
- Strong security posture with next generation firewall and real-time threat protection

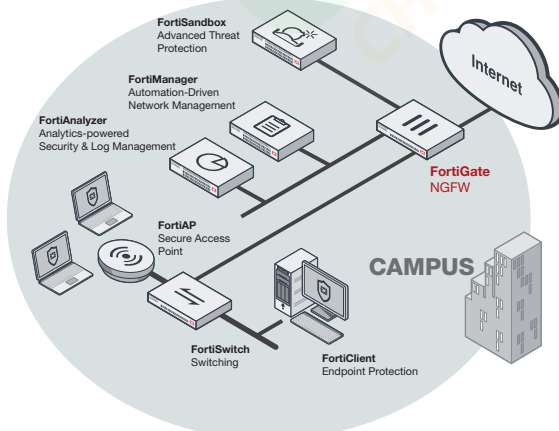


### Secure Web Gateway (SWG)

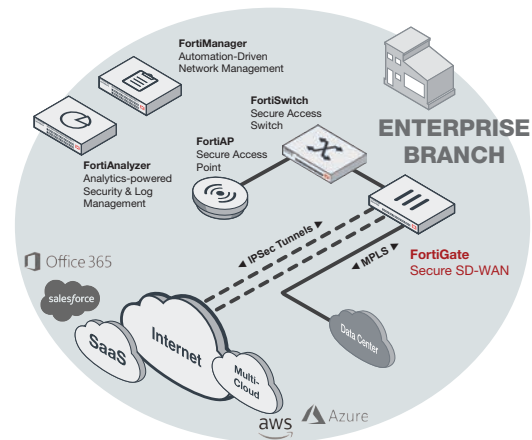
- Secure web access from both internal and external risks, even for encrypted traffic at high performance
- Enhanced user experience with dynamic web and video caching
- Block and control web access based on user or user groups across URL's and domains
- Prevent data loss and discover user activity to known and unknown cloud applications
- Block DNS requests against malicious domains
- Multi-layered advanced protection against zero-day malware threats delivered over the web



FortiGate 100F SWG deployment



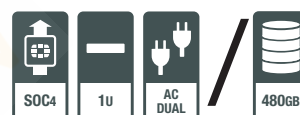
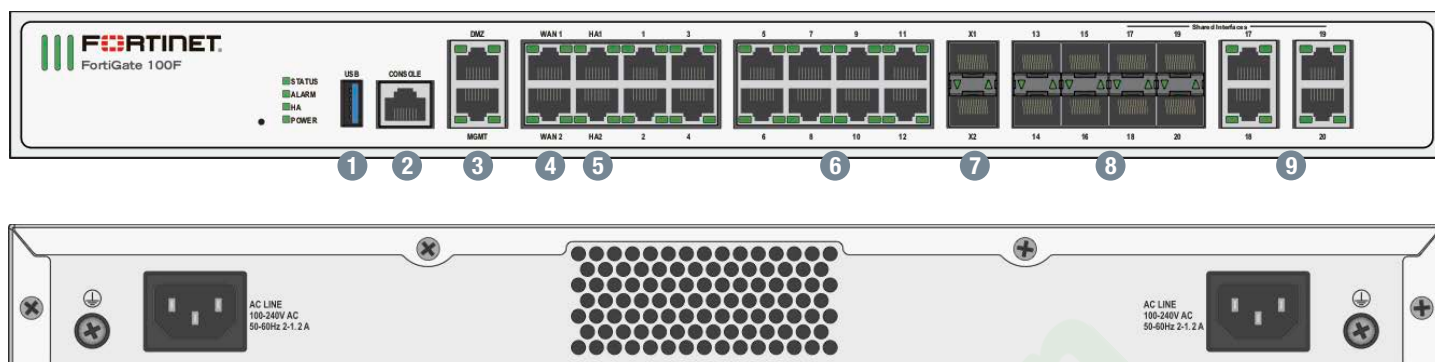
FortiGate 100F deployment in Campus (NGFW)



FortiGate 100F deployment in Enterprise Branch (Secure SD-WAN)

## Hardware

### FortiGate 100F/101F



### Interfaces

- |                              |                                      |
|------------------------------|--------------------------------------|
| 1. USB Port                  | 6. 12x GE RJ45 Ports                 |
| 2. Console Port              | 7. 2x 10 GE SFP+ FortiLink Slots     |
| 3. 2x GE RJ45 MGMT/DMZ Ports | 8. 4x GE SFP Slots                   |
| 4. 2x GE RJ45 WAN Ports      | 9. 4x GE RJ45/SFP Shared Media Pairs |
| 5. 2x GE RJ45 HA Ports       |                                      |

#### Powered by Purpose-built Secure SD-WAN ASIC SOC4



- Combines a RISC-based CPU with Fortinet's proprietary Security Processing Unit (SPU) content and network processors for unmatched performance
- Delivers industry's fastest application identification and steering for efficient business operations
- Accelerates IPsec VPN performance for 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

### Dual Power Supplies

Power supply redundancy is essential in the operation of mission-critical networks. The FortiGate 100F Series offers dual built-in non-hot swappable power supplies.

### Extends Security to Access Layer with FortiLink Ports

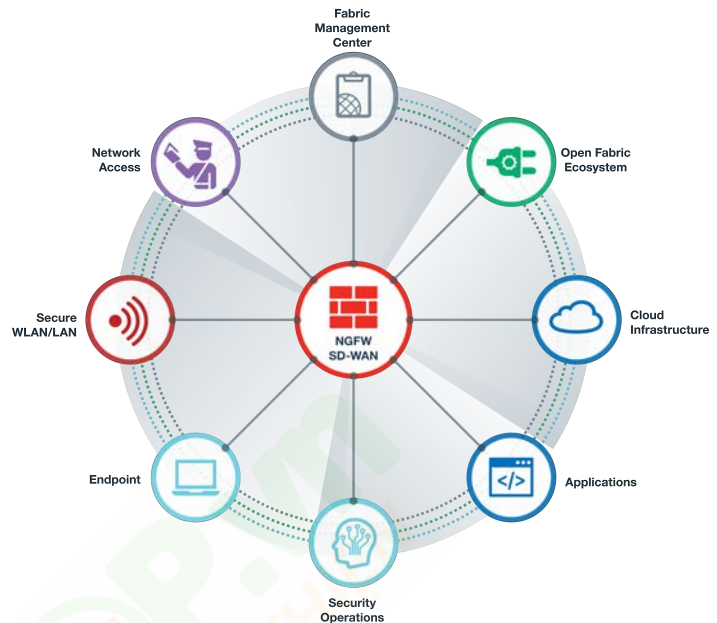
FortiLink protocol enables you to converge security and the network access by integrating the FortiSwitch into the FortiGate as a logical extension of the NGFW. These FortiLink enabled ports can be reconfigured as regular ports as needed.

## Fortinet Security Fabric

### Security Fabric

The Security Fabric is the cybersecurity platform that enables digital innovations. It delivers broad visibility of the entire attack surface to better manage risk. Its unified and integrated solution reduces the complexity of supporting multiple-point products, while automated workflows increase operational speeds and reduce response times across the Fortinet deployment ecosystem. The Fortinet Security Fabric covers the following key areas under a single management center:

- **Security-Driven Networking** that secures, accelerates, and unifies the network and user experience
- **Zero Trust Network Access** that identifies and secures users and devices in real-time, on and off of the network
- **Dynamic Cloud Security** that protects and controls cloud infrastructures and applications
- **AI-Driven Security Operations** that automatically prevents, detects, isolates, and responds to cyber threats



### FortiOS

FortiGates are the foundation of the Fortinet Security Fabric—the core is FortiOS. All security and networking capabilities across the entire FortiGate platform are controlled with one intuitive operating system. FortiOS reduces complexity, costs, and response times by truly consolidating next-generation security products and services into one platform.

- A truly consolidated platform with a single OS and pane-of-glass for across the entire digital attack surface.
- Industry-leading protection: NSS Labs Recommended, VB100, AV Comparatives, and ICSA validated security and performance.
- Leverage the latest technologies such as deception-based security.

- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings in addition to true TLS 1.3 support.
- Automatically prevent, detect, and mitigate advanced attacks within minutes with an integrated AI-driven security and advanced threat protection.
- Improve and unify the user experience with innovative SD-WAN capabilities with the ability to detect, contain, and isolate threats with automated segmentation.
- Utilize SPU hardware acceleration to boost network security performance.

## Services



### FortiGuard™ Security Services

FortiGuard Labs offer 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 and other network and security vendors, as well as law enforcement agencies.



### 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.



For more information, please refer to [forti.net/fortiguard](https://forti.net/fortiguard) and [forti.net/forticare](https://forti.net/forticare)

## Specifications

	FORTIGATE 100F	FORTIGATE 101F
<b>Hardware Specifications</b>		
GE RJ45 Ports	12	
GE RJ45 Management/HA/DMZ Ports	1 / 2 / 1	
GE SFP Slots	4	
10 GE SFP+ Slots	2	
GE RJ45 WAN Ports	2	
GE RJ45 or SFP Shared Ports *	4	
USB Port	1	
Console Port	1	
Internal Storage	—	1x 480 GB SSD
Included Transceivers	0	
<b>System Performance — Enterprise Traffic Mix</b>		
IPS Throughput <sup>2</sup>	2.6 Gbps	
NGFW Throughput <sup>2,4</sup>	1.6 Gbps	
Threat Protection Throughput <sup>2,5</sup>	1 Gbps	
<b>System Performance</b>		
Firewall Throughput (1518 / 512 / 64 byte UDP packets)	20 / 18 / 10 Gbps	
Firewall Latency (64 byte UDP packets)	5 µs	
Firewall Throughput (Packets Per Second)	15 Mpps	
Concurrent Sessions (TCP)	1.5 Million	
New Sessions/Second (TCP)	56,000	
Firewall Policies	10,000	
IPsec VPN Throughput (512 byte) <sup>1</sup>	11.5 Gbps	
Gateway-to-Gateway IPsec VPN Tunnels	2,500	
Client-to-Gateway IPsec VPN Tunnels	16,000	
SSL-VPN Throughput	1 Gbps	
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)	500	
SSL Inspection Throughput (IPS, avg. HTTPS) <sup>3</sup>	1 Gbps	
SSL Inspection CPS (IPS, avg. HTTPS) <sup>3</sup>	1,800	
SSL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>	135,000	
Application Control Throughput (HTTP 64K) <sup>2</sup>	2.2 Gbps	
CAPWAP Throughput (HTTP 64K)	15 Gbps	
Virtual Domains (Default / Maximum)	10 / 10	
Maximum Number of FortiSwitches Supported	24	
Maximum Number of FortiAPs (Total / Tunnel Mode)	128 / 64	
Maximum Number of FortiTokens	5,000	
High Availability Configurations	Active / Active, Active / Passive, Clustering	

	FORTIGATE 100F	FORTIGATE 101F
Dimensions		
Height x Width x Length (inches)	1.73 x 17 x 10	
Height x Width x Length (mm)	44 x 432 x 254	
Form Factor (supports EIA / non-EIA standards)	Rack Mount, 1 RU	
Weight	7.25 lbs (3.29 kg)	7.56 lbs (3.43 kg)
Environment		
Power Required	100–240V AC, 50-60	
Maximum Current	100V / 1A, 240V / 0.5A	
Power Consumption (Average / Maximum)	35.1 W / 38.7 W	35.3 W / 39.1 W
Heat Dissipation	119.77 BTU/h	121.13 BTU/h
Redundant Power Supplies	Yes	
Environment		
Operating Temperature	32–104°F (0–40°C)	
Storage Temperature	-31–158°F (-35–70°C)	
Operating Altitude	Up to 7,400 ft (2,250 m)	
Humidity	10–90% non-condensing	
Noise Level	40.4 dBA	
Compliance	FCC Part 15B, Class A, CE, RCM, VCCI, UL/cUL, CB, BSMI	
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN; IPv6	

\* Copper SFP module is not supported.

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

1. IPsec VPN performance test uses AES256-SHA256.

2. IPS (Enterprise Mix), Application Control, NGFW, and Threat Protection are measured with Logging enabled.

3. SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

4. NGFW performance is measured with Firewall, IPS, and Application Control enabled.

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



## Order Information

Product	SKU	Description
FortiGate 100F	FG-100F	22x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x Mgmt port, 2x HA ports, 16x switch ports with 4 SFP port shared media), 4 SFP ports, 2x 10 GE SFP+ FortiLinks, dual power supplies redundancy
FortiGate 101F	FG-101F	22x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x Mgmt port, 2x HA ports, 16x switch ports with 4 SFP port shared media), 4 SFP ports, 2x 10 GE SFP+ FortiLinks, 480GB onboard storage, dual power supplies redundancy
Optional Accessories		
1 GE SFP LX transceiver module	FG-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots
1 GE SFP RJ45 transceiver module	FG-TRAN-GC	1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+ slots
1 GE SFP SX transceiver module	FG-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots
10 GE SFP+ transceiver module, short range	FG-TRAN-SFP+SR	10 GE SFP+ transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots

## Bundles



### FortiGuard 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 one of these FortiGuard Bundles.

Bundles	360 Protection	Enterprise Protection	Unified Threat Protection	Threat Protection
FortiCare	ASE <sup>1</sup>	24x7	24x7	24x7
FortiGuard App Control Service	•	•	•	•
FortiGuard IPS Service	•	•	•	•
FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	•
FortiGuard Web Filtering Service	•	•	•	
FortiGuard Antispam Service	•	•	•	
FortiGuard Security Rating Service	•	•		
FortiGuard Industrial Service	•	•		
FortiGuard IoT Detection Service <sup>2</sup>	•	•		
FortiConverter Service	•	•		
IPAM Cloud <sup>2</sup>	•			
SD-WAN Orchestrator Entitlement <sup>2</sup>	•			
SD-WAN Cloud Assisted Monitoring	•			
SD-WAN Overlay Controller VPN Service	•			
FortiAnalyzer Cloud	•			
FortiManager Cloud	•			

1. 24x7 plus Advanced Services Ticket Handling 2. Available when running FortiOS 6.4