

# FortiGate Edge devices

## Windstream Enterprise SD-WAN and Managed Security with Fortinet

FortiGate Edge devices offer SD-WAN with an excellent security solution for enterprise offices with branches from small to large. Protect against cyber threats with industry-leading secure SD-WAN in a simple, affordable and easy-to-deploy solution.

### 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 and unknown attacks using continuous threat intelligence from AI powered FortiGuard Labs security services

### Certification

Independently tested and validated best security effectiveness and performance

Received unparalleled third-party certifications from NSS Labs, ICSA, Virus Bulletin and AV Comparatives

### Performance

Delivers industry's best threat protection performance and ultra-low latency using purpose-built security processor technology

Provides industry-leading performance and protection for SSL encrypted traffic

### Networking

Enables flexible deployment such as UTM and secure SD-WAN capabilities to enable application steering using WAN path control for a high-quality experience

Delivers extensive routing, switching, wireless controller, high-performance, and scalable IPsec VPN capabilities

### WE Connect Portal

Create your own customized dashboards with a variety of widgets to choose from and grant others permission to customize their own dashboards

Create customized naming for locations and devices and add customized tagging to create filters for simplified monitoring

Access to WE Connect, safe-guarded with 2 factor authentication to protect your information

WE Connect alerts you when network performance becomes degraded or fails, and Windstream Enterprise takes proactive measures to resolve issues

### FortiPortal

Comprehensive co-management options provide true co-management capabilities, enabling customers to share control and management responsibilities with Windstream Enterprise, enhancing flexibility and operational efficiency

Self-managed customization empowers customers with Forti Manager configuration and installation visibility and capabilities, allowing them to execute on-demand, business-specific updates and customizations, ensuring their security profiles and policies are always aligned with business objectives

User role-based access allows customers to define granular access controls based on user roles, enabling specific permissions for viewing content, generating reports, or modifying and installing updates, ensuring tailored access for different user needs

With access to FortiAnalyzer-driven insights, customers gain superior visibility and the ability to perform detailed data analysis with enhanced insights and reporting

## Deployment

### Unified Threat Management (UTM)

Integrated wired networking to simplify IT

Purpose-built hardware for industry-leading performance and easy administration

Provides consolidated security and networking for businesses and consistently provides top-rated threat protection

Proactively blocks newly discovered sophisticated attacks in real-time with advanced threat protection

### SD-WAN

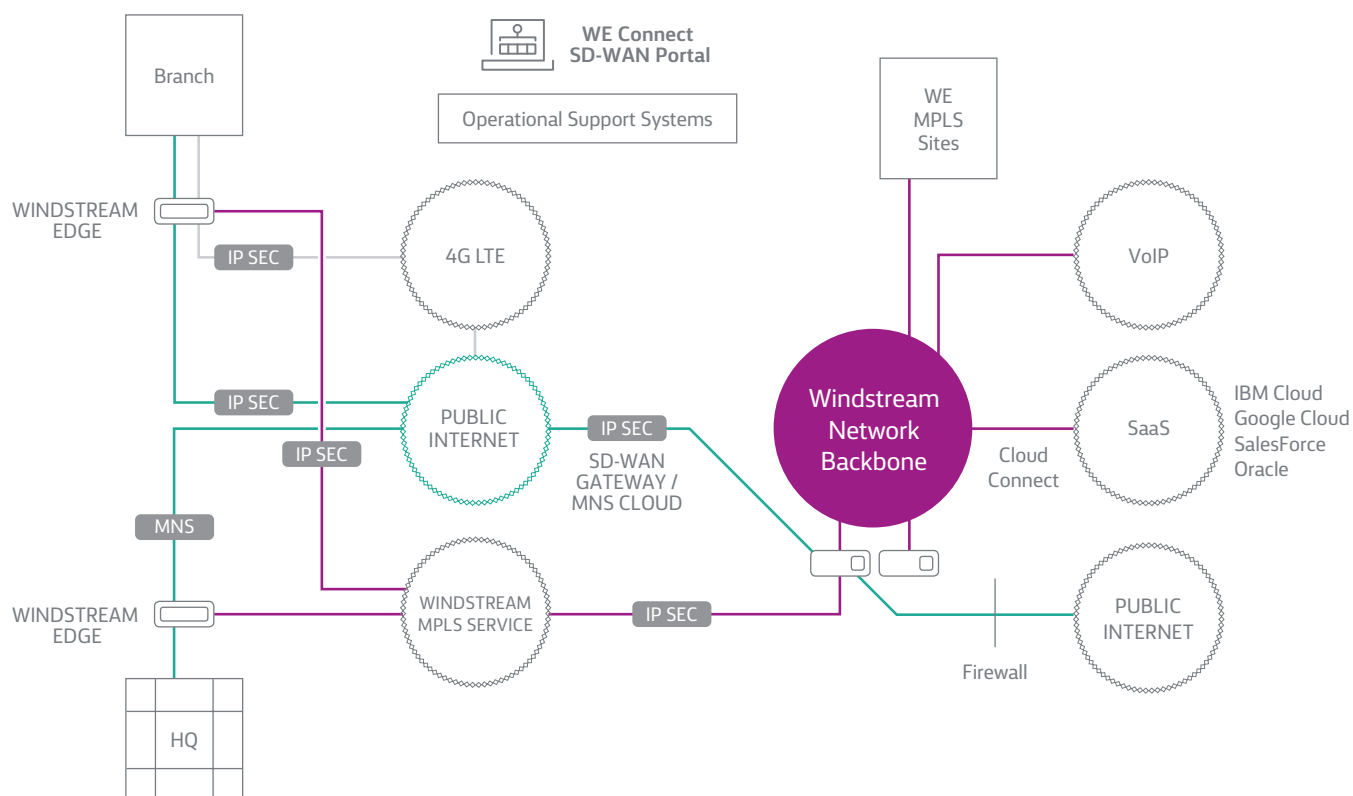
Industry's best IPsec VPN and SSL inspection performance, powered by security processor technology

Centralized visibility to network health, configuration management, and security through WE Connect Portal

Secure direct Internet access for Cloud Applications for improved latency and reduced WAN cost

Efficient high-performance threat protection capabilities that are cost-effective

WAN Path Controller and Link Health Monitoring for better application performance and quality

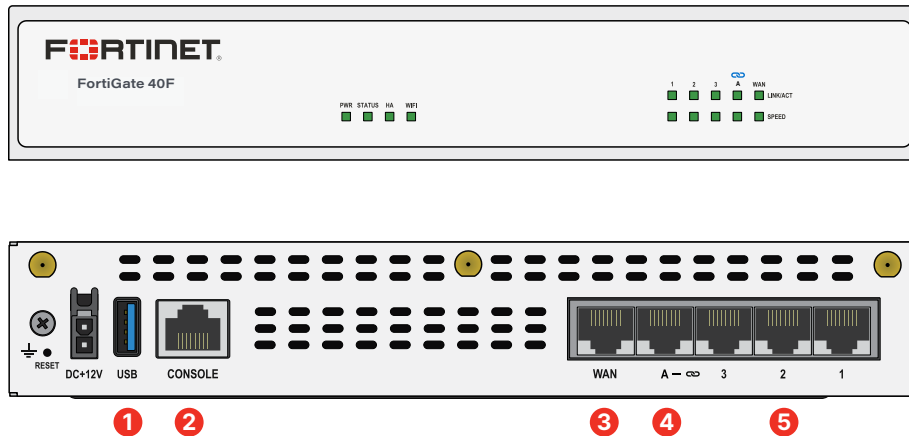


## Performance

Performance	40F	60F	100F	200F	600E	1800F
SD-WAN	625Mbps	650Mbps	1.5Gbps	6Gpbs	6Gbps	7 Gbps
Advanced/premium	225Mbps	310Mbps	510Gbps	2.76Gpbs	4.5Gbps	7 Gbps

# FortiGate 40F

## Hardware



### Interfaces

1. 1x USB port
2. 1x Console port
3. 1x GE RJ45 WAN port
4. 1x GE RJ45 FortiLink port
5. 3x GE RJ45 Ethernet 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 the best-of-breed NGFW Security and Deep SSL inspection with high performance

### 3G/4G WAN connectivity

The FortiGate 40F Series includes a USB port that allows you to plug in a compatible third-party 3G/4G USB modem, providing additional WAN connectivity or a redundant link for maximum reliability.

### Compact and reliable form factor

Designed for small environments, you can place it on a desktop or wall-mount it. It's small and lightweight, yet highly reliable with a superior Mean Time Between Failure (MTBF), minimizing the chance of a network disruption.

# FortiGate 40F

## Specifications

### Dimensions and power

Height x width x length (inches)	1.5 x 8.5 x 6.3
Height x width x length (mm)	38.5 x 216 x 160
Weight	2.2 lbs (1 kg)
Form factor (supports EIA/non-EIA standards)	desktop
Input rating	12Vdc, 3A
Power required	powered by external DC Power adapter, 100–240V AC, 50/60 Hz
Power consumption (average / maximum)	13.4 W / 15.4 W
Current (maximum)	100V AC / 0.2A, 240V AC / 0.1A
Heat dissipation	52.55 BTU/h
Redundant power supplies	no

### Operating environment and certifications

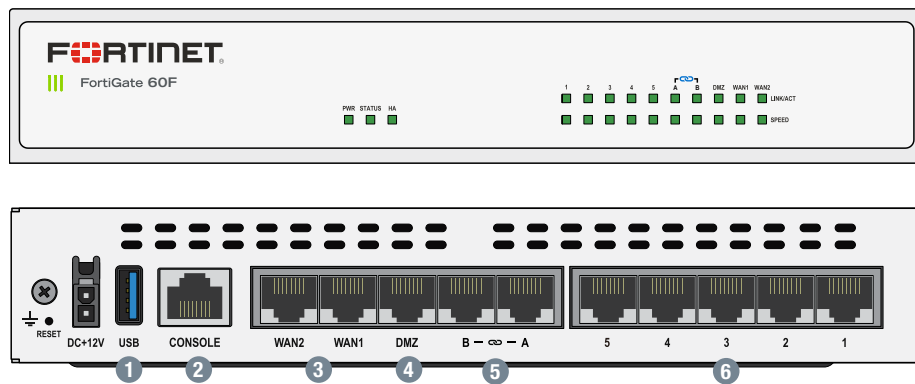
Operating temperature	32–104°F (0–40°C)
Storage temperature	-31–158°F (-35–70°C)
Humidity	10–90% non-condensing
Noise level	fanless 0 dBA
Operating altitude	up to 7400 ft (2250 m)
Compliance	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN

## Order Information

Product	SKU	Description
FortiGate 40F	FG-40F	5 x GE RJ45 ports (including 4 x internal ports, 1 x WAN ports)

# FortiGate 60F

## Hardware



### Interfaces

1. USB port
2. Console port
3. 2x GE RJ45 WAN ports
4. 1x GE RJ45 DMZ port
5. 2x GE RJ45 FortiLink ports
6. 5x GE RJ45 Internal 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

### 3G/4G WAN connectivity

The FortiGate 60F Series includes a USB port that allows you to plug in a compatible third-party 3G/4G USB modem, providing additional WAN connectivity or a redundant link for maximum reliability.

### Compact and reliable form factor

Designed for small environments, you can place it on a desktop or wall-mount it. It's small and lightweight, yet highly reliable with superior MTBF, minimizing the chance of a network disruption.

# FortiGate 60F

## Specifications

### Dimensions

Height x width x length (inches)	1.5 x 8.5 x 6.3
Height x width x length (mm)	38 x 216 x 160
Weight	1.9 lbs (0.9 kg)
Form factor	desktop

### Operating environment and certifications

Power required	100–240V AC, 50–60 Hz (external DC Power adapter, 12 VDC)
Maximum current	115V AC / 0.2A, 230V AC / 0.1A
Total available PoE power budget*	N/A
Power Consumption (average / maximum)	17.0 W / 18.5 W
Heat dissipation	63.1 BTU/hr
Operating temperature	32–104°F (0–40°C)
Storage temperature	-31–158°F (-35–70°C)
Humidity	10–90% non-condensing
Noise level	fanless 0 dBA
Operating altitude	up to 7,400 ft (2,250 m)
Compliance	FCC Part 15 Class B, C-Tick, VCCI, CE, UL/cUL, CB
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN

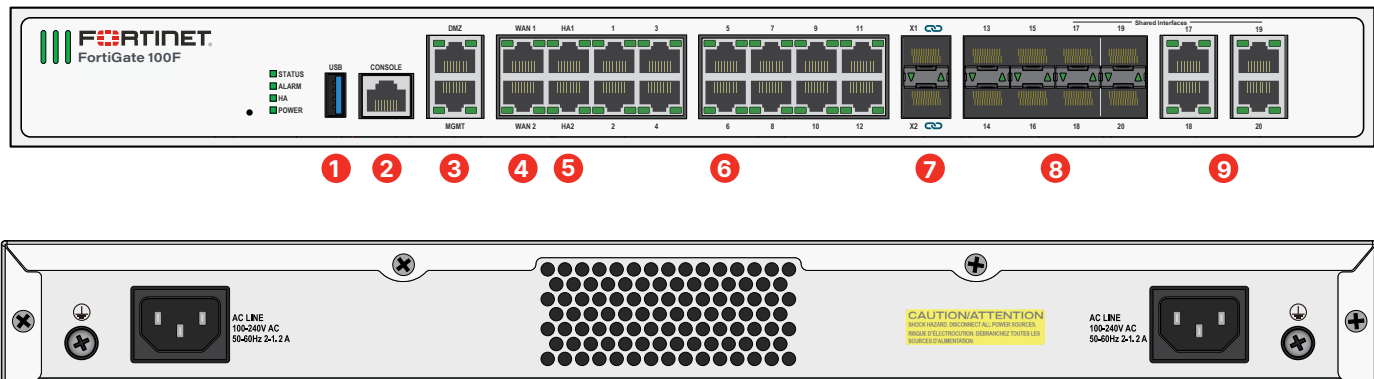
\* Maximum loading on each PoE/+ port is 30 W (802.3at).

## Order Information

Product	SKU	Description
FortiGate 60F	FG-60F	10x GE RJ45 ports (including 7x Internal ports, 2x WAN ports, 1x DMZ port)

# FortiGate 100F

## Hardware



### Interfaces

- |                              |                                      |
|------------------------------|--------------------------------------|
| 1. 1x USB port               | 6. 12x GE RJ45 ports                 |
| 2. 1x 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

### Dual power supplies

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

# FortiGate 100F

## Specifications

### Dimensions and power

Height x width x length (inches)	1.73 x 17 x 10
Height x width x length (mm)	44 x 432 x 254
Weight	7.25 lbs (3.29 kg)
Form factor (supports EIA/non-EIA standards)	rack mount, 1 RU
AC power supply	100–240V AC, 50/60 Hz
Power consumption (average / maximum)	35.1 W / 38.7 W
Current (maximum)	100V / 1A, 240V / 0.5A
Heat dissipation	119.77 BTU/h
Redundant power supplies	yes

### 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	40.4 dBA
Forced airflow	side to back
Operating altitude	up to 7400 ft (2250 m)
Compliance	FCC Part 15B, Class A, CE, RCM, VCCI, UL/cUL, CB, BSMI
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN; IPv6

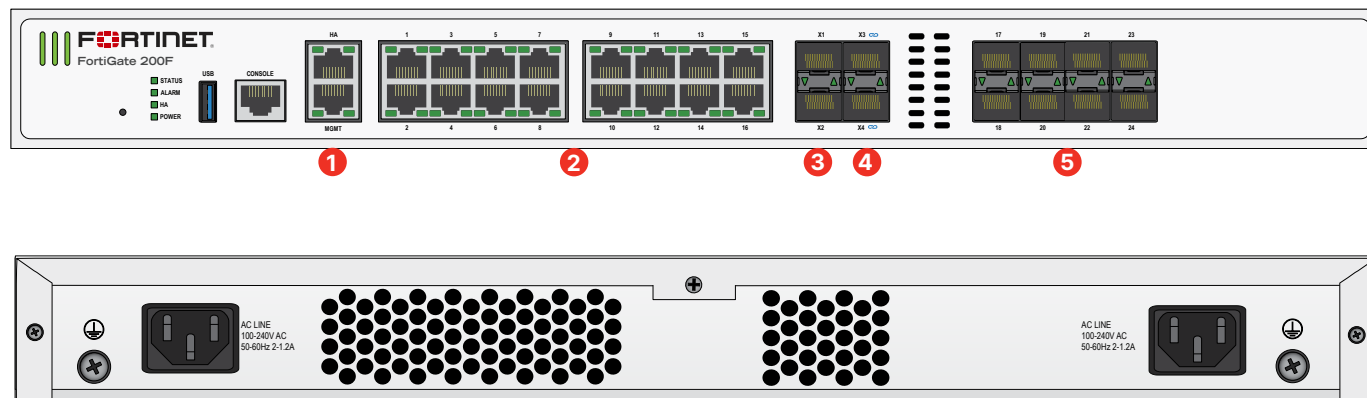
## Order Information

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)



# FortiGate 200F

## Hardware



### Interfaces

1. 2x GE RJ45 HA / MGMT ports
2. 16x GE RJ45 ports
3. 2x 10 GE SFP+ slots
4. 2x 10 GE SFP+ FortiLink slots
5. 8x GE SFP slots

### Network processor

Fortinet's new, breakthrough SPU NP6XLite 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

Fortinet's ninth generation custom SPU CP9 content processor works outside of the direct flow of traffic and accelerates the inspection.

### Powered by SPU

Fortinet's custom SPU 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

SPU 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

# FortiGate 200F

## Specifications

### Dimensions and power

Height x width x length (inches)	1.73 x 17.01 x 13.47
Height x width x length (mm)	44 x 432 x 342
Weight	9.92 lbs (4.5 kg)
Form factor (supports EIA/non-EIA standards)	ear mount, 1 RU
AC power supply	100–240V AC, 50/60 Hz
Power consumption (average / maximum)	101.92 W / 118.90 W
Current (maximum)	100V / 2A, 240V / 1.2A
Heat dissipation	405.70 BTU/h
Redundant power supplies	yes

### Operating environment and certifications

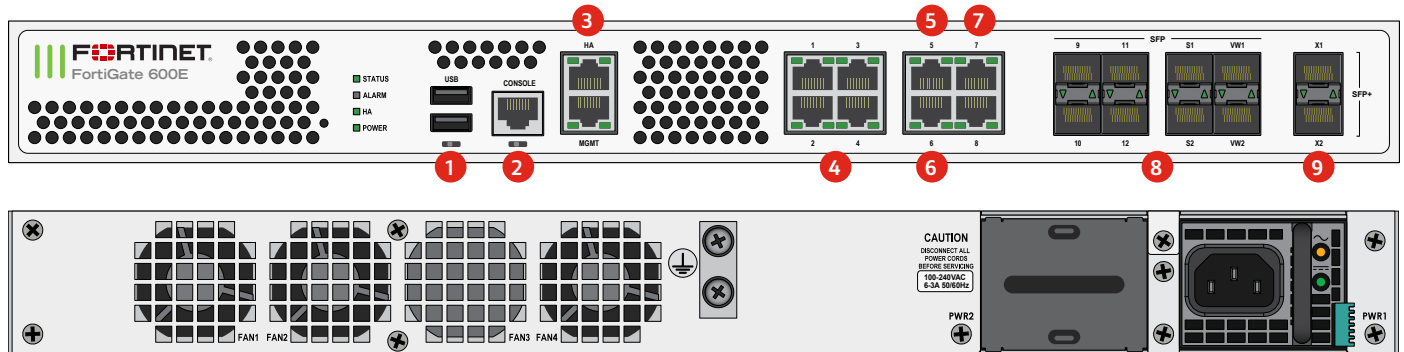
Operating temperature	32–104°F (0–40°C)
Storage temperature	-31–158°F (-35–70°C)
Humidity	20–90% non-condensing
Noise level	49.9 dBA
Forced airflow	side to back
Operating altitude	up to 7400 ft (2250 m)
Compliance	FCC Part 15B, Class A, CE, RCM, VCCI, UL / cUL, CB, BSMI
Certifications ICSA Labs:	Firewall, IPsec, IPS, Antivirus, SSL-VPN, IPv6

## Order Information

Product	SKU	Description
FortiGate 200F	FG-200F	18 x GE RJ45 (including 1 x MGMT port, 1 X HA port, 16 x switch ports)

# FortiGate 600E

## Hardware



### Interfaces

- |                                      |                            |
|--------------------------------------|----------------------------|
| 1. 2x USB ports                      | 6. 1x GE RJ45 switch port  |
| 2. 1x Console port                   | 7. 2x GE RJ45 switch ports |
| 3. 1x HA Port – GE RJ 45 switch port | 8. 8x GE SFP slots         |
| 4. 4x GE RJ45 WAN ports              | 9. 2x 10GE SFP+ slots      |
| 5. 1x GE RJ45 switch port            |                            |

### Wireless and 3G/4G WAN Extensions

The FortiGate supports external 3G/4G modems that allow additional or redundant WAN connectivity for maximum reliability.

### Powered by SPU

Custom SPU 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. SPU 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 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 down to 2 microseconds, VPN, CAPWAP and IP tunnel acceleration, anomaly-based intrusion prevention, checksum offload and packet defragmentation, and traffic shaping and priority queuing.

### Content Processor

Fortinet's new, breakthrough SPU 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 and encryption and decryption offloading.

# FortiGate 600E

## Specifications

### Dimensions and power

Height x width x length (inches)	1.75 x 17.0 x 15.0
Height x width x length (mm)	44.45 x 432 x 380
Weight	16.1 lbs (7.3 kg)
Form factor	1 RU
Power source	100–240V AC, 60–50 Hz
Maximum current	6A @100V
Power consumption (average / maximum)	129W / 244W
Heat dissipation	832 BTU/h

### 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
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;USGv6/IPv6

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

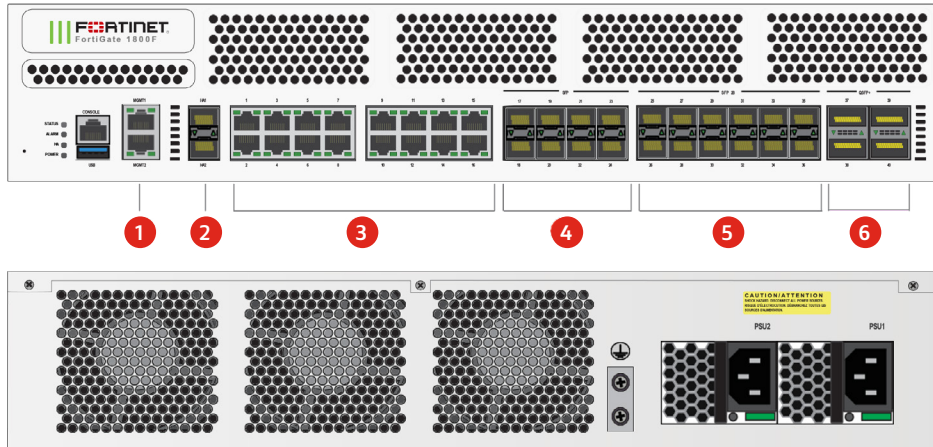
1. IPsec VPN performance test uses AES256-SHA256.
2. IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.
3. NGFW performance is measured with Firewall, IPS and Application Control enabled.
4. Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

## Order Information

Product	SKU	Description
FortiGate 600E	FG-600E	2x 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 1800F

## Hardware



### Interfaces

1. 2 x GE RJ45 MGMT ports
2. 2 x 10 GE SFP+ / GE SFP HA slots
3. 16 x GE RJ45 ports
4. 8 x GE SFP slots
5. 12 x 25 SFP28 / 10 GE SFP+ / GE SFP slots
6. 4 x 100 GE QSFP28 / 40 GE QSFP+ slots\*

\* FortiOS 7.4+ is required for 100 GE support

### 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.

### Network Processor NP7

Network Processors operate inline to deliver unmatched performance and scalability for critical network functions. Fortinet's breakthrough SPU NP7 network processor works in line with FortiOS functions to deliver:

Hyperscale firewall, accelerated session setup, and ultra-low latency

Industry-leading performance for VPN, VXLAN termination, hardware logging, and elephant flows

### 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

# FortiGate 1800F

## Specifications

### Dimensions and power

Height x width x length (inches)	3.5 x 17.25 x 21.1
Height x width x length (mm)	88.4 x 438 x 536
Weight	30.2 lbs (13.7 kg)   30.4 lbs (13.8 kg)
Form factor	Rack mount, 2RU
AC Power Supply	100–240VAC, 50/60 Hz
AC Current (Maximum)	7A@100VAC, 3A@240VAC
DC Power Supply	-48V to -60V DC
DC Current (Maximum)	20A
Power consumption (average / maximum)	410.9 W / 459.1 W   414.9 W / 463.1 W
Heat dissipation	1565.53 BTU/h   1579.2 BTU/h

### 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	62.74 dBA
Operating altitude	Up to 7,400 ft (2250 m)
Compliance	FCC Part 15 Class A, RCM, VCCI, CE, UL/cUL, CB
Certifications ICSA Labs	USGv6/IPv6

## Order Information

Product	SKU	Description
FortiGate 1800F	FG-1800F	4x 100GE/40GE QSFP28 slots, 12x 25GE SFP28 /10GE SFP+ slots, 2x 10GE SFP+ HA slots, 8x GE SFP slots, 18x GE RJ45 ports. SPU NP7 and CP9 accelerated, dual AC power supplies

# Managed security options: cloud or premises based

	Advanced	Premium
Firewall	+	+
Remote access VPN	+	+
Site-to-site VPN	+	+
Weekly logs + reporting	+	+
Application control	+	+
Web content filtering	+	+
Intrusion Prevention System (IPS)	+	+
SIEM		+

Our managed connectivity, communications and security solutions are innovative.

Your business outcomes are imperative.

Windstream Enterprise drives business transformation through the convergence of our proprietary software solutions and cloud-optimized network to unlock our clients’ revenue and profitability potential. Our end-to-end IT managed services modernize technology infrastructure, optimize operations, eliminate resource constraints and elevate the experience of our clients and their end users, while securing their critical data and brand reputation. Analysts recognize Windstream Enterprise as a market leader for our product innovation, and clients rely on our best-in-class management portal. Businesses trust Windstream Enterprise as their single-source for a high-performance network and award-winning suite of connectivity, collaboration and security solutions—delivered by a team of technology experts whose success is directly tied to our clients’ complete satisfaction.

To learn more about Windstream Enterprise, visit [windstreamenterprise.com](http://windstreamenterprise.com)

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