

# FortiGate Rugged Firewalls

FGR-60F, FGR-60F-3G4G, FGR-70F, and FGR-70F-3G4G



## Highlights

### Ruggedized Appliance

with fanless design ensures reliable operations in harsh conditions

### Security-Driven

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

**Enterprise Security** with consolidated AI-powered FortiGuard Services

**Built-in SD-WAN** supports reliable connectivity with lower costs and better user experience

### Simplified Management

enables faster deployment, comprehensive monitoring, security automation, and easier management

## Security Solutions for Mission Critical Industrial Environments

FortiGate Rugged Series next-generation firewalls (NGFW) are best for building security-driven networks without impacting network performance. These next-gen firewalls are built to withstand harsh environmental conditions commonly found in industrial networks and operational technology (OT).

Unlike traditional security solutions made for office and enterprise networks, the FortiGate Rugged Series is industrially rugged and offer all-in-one security appliances with advanced threat protection capabilities for securing critical industrial networks against cyber threats.

Model	IPS	NGFW	Threat Protection	Interfaces
FGR-60F FGR-60F-3G4G	950 Mbps	550 Mbps	500 Mbps	Multiple GE RJ45, 2 SFP slots, 1 bypass pair   Variant with 3G4G Modem and GPS
FGR-70F FGR-70F-3G4G	975 Mbps	950 Mbps	580 Mbps	Multiple GE RJ45, 2 SFP slots, 1 bypass pair   Variant with 3G4G Modem and GPS   Digital I/O Module



Available in



Rugged Appliance

## FortiOS Everywhere

### FortiOS, Fortinet's Advanced Operating System

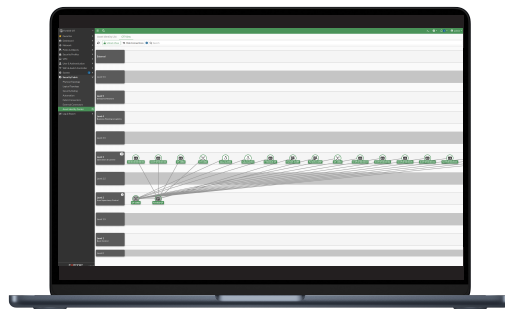
FortiOS enables the convergence of high performing networking and security across the Fortinet Security Fabric. Because it can be deployed anywhere, it delivers consistent and context-aware security posture across network, endpoint, and multi-cloud environments.

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 organically built best-of-breed capabilities, unified operating system, and ultra-scalability. The solution allows organizations to protect all edges, simplify operations, and run their business without compromising performance or protection.

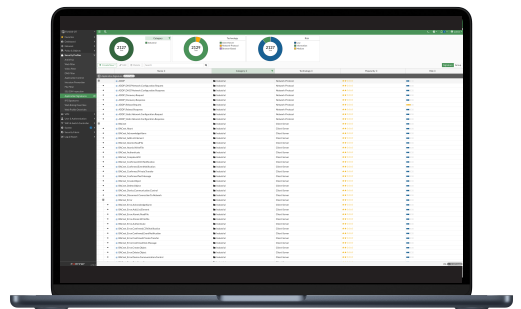
FortiOS dramatically expands the Fortinet Security Fabric's ability to deliver advanced AI/ML-powered services, inline advanced sandbox detection, integrated ZTNA enforcement, and more. It provides protection across hybrid deployment models for hardware, software, and Software-as-a-Service with SASE.

FortiOS expands visibility and control, ensures the consistent deployment and enforcement of a simplified, single policy and management framework. Its security policies enable 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

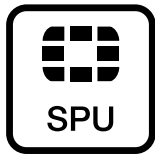


*OT focused dashboard for assets and analytics*



*Visibility and control for OT applications and protocols*

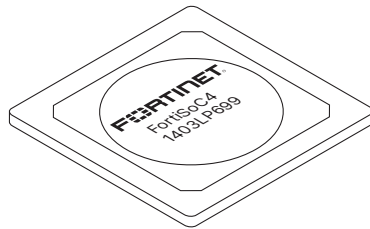
## Secure Any Edge at Any Scale



### 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

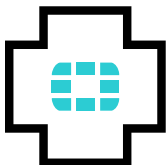


### Secure SD-WAN ASIC SOC4

- 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

### Trusted Platform Module (TPM)

The FortiGate Rugged 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.



### 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



### Industrial Security

- Implement industrial-grade security across the industrial networks with industry certified next-generation firewall appliances
- Secure industrial networks with deep packet inspection (DPI) for 50+ OT applications and protocols supporting up to payload level visibility and control
- Apply virtual patching or vulnerability shielding with OT centric IPS (intrusion prevention system) and minimize risks against security threats that have potential to exploit known or unknown vulnerabilities



### Network Segmentation and Microsegmentation

- Network segmentation implements the concept of security zones and conduits and prevent unauthorized access to critical OT assets, the firewall acts as a conduit between different zones and offers secure pathway for communication
- Network segmentation limits the impact of any security incidents that occur within a specific zone and supports North and South network traffic monitoring and threat protection
- Network microsegmentation further segments the security zones based on different security requirements and supports East and West network traffic monitoring and deep packet inspection preventing lateral movement attacks

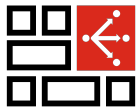


### Next Generation Firewall (NGFW)

- FortiGuard Labs' suite of AI-powered Security Services—natively integrated with your FortiGate Rugged 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



## Use Cases



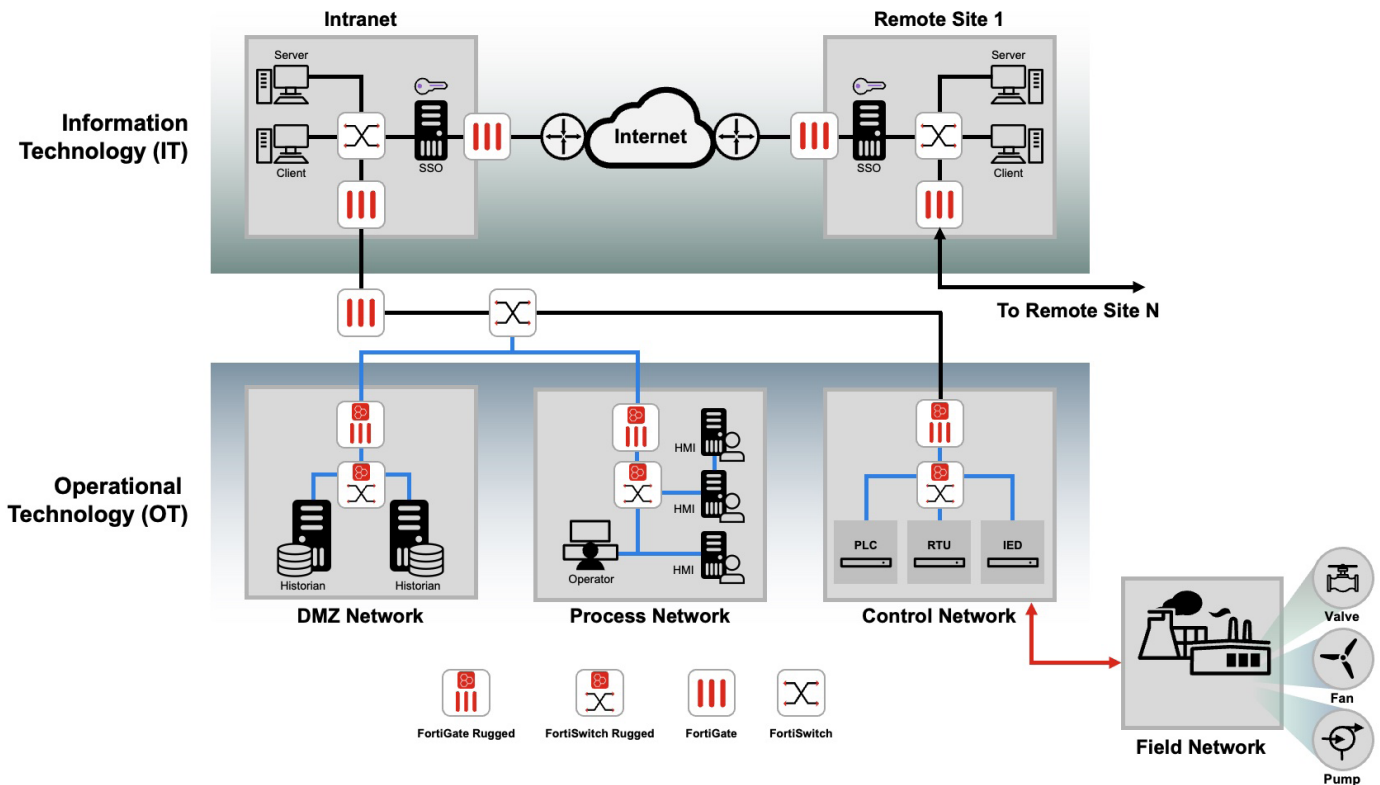
### Secure SD-WAN

- 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



Typical Deployment of FortiGate Firewalls in IT/OT Networks



## 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

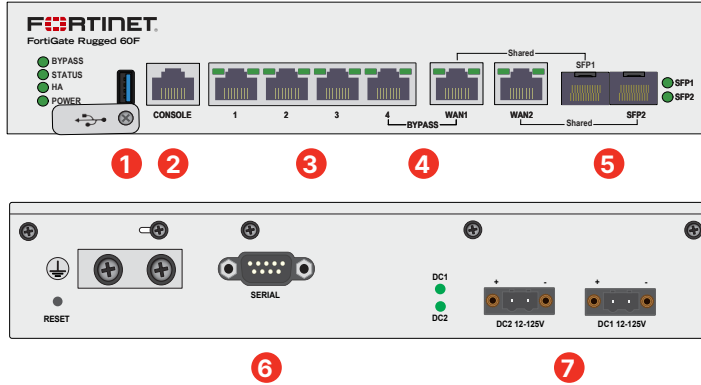
Zero-day threat prevention entails Fortinet's AI-based inline malware prevention, our most advanced sandbox service, to analyze and block unknown files in real-time, offering sub-second protection against zero-day and sophisticated threats across all NGFWs. The service also has a built-in MITRE ATT&CK® 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

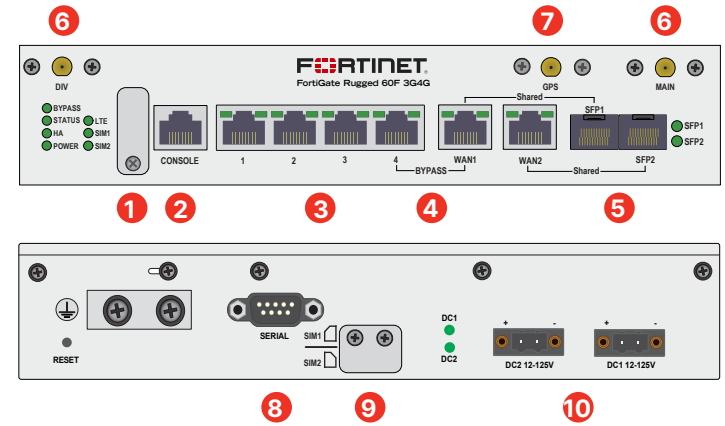
The service provides OT detection, OT vulnerability correlation, virtual patching, OT signatures, and industry-specific protocol decoders for overall robust defense of OT environments and devices.

## Hardware

### FortiGate Rugged 60F



### FortiGate Rugged 60F-3G4G



### Interfaces

- 1x USB Port
- 1x RJ45 Console Port
- 4x GE RJ45 Ports
- 1x GE RJ45 Bypass Port Pair (PORT4 and WAN1)\*
- 2x GE RJ45/SFP Shared Media Ports
- 1x DB9 Serial Port (RS-232)
- 2x DC Power Inputs (Redundant)

\* NOTE: WAN1/WAN2 and SFP1/SFP2 are shared interfaces

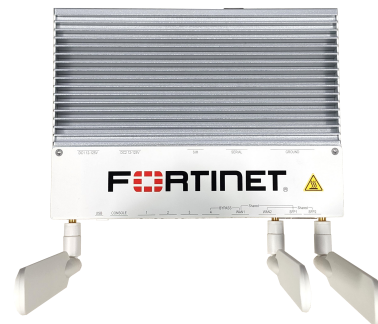
### Interfaces

- 1x USB Port
- 1x RJ45 Console Port
- 4x GE RJ45 Ports
- 1x GE RJ45 Bypass Port Pair (PORT4 and WAN1)\*
- 2x GE RJ45/SFP Shared Media Ports
- 2x SMA Antennae Connections for Cellular Wireless
- 1x SMA Antenna Connection for GPS
- 1x DB9 Serial Port (RS-232)
- 1x Integrated 3G/4G LTE Modem (Dual SIM - Active/Passive)
- 2x DC Power Inputs (Redundant)

\* NOTE: WAN1/WAN2 and SFP1/SFP2 are shared interfaces



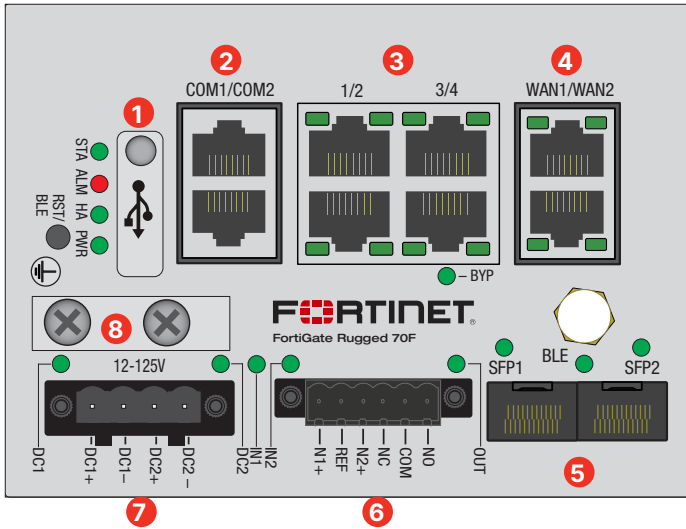
FortiGate Rugged 60F



FortiGate Rugged 60F-3G4G

## Hardware

### FortiGate Rugged 70F



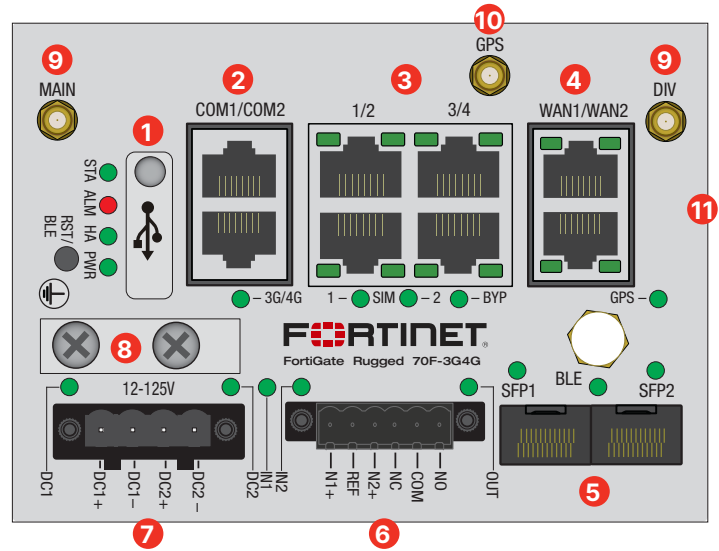
#### Interfaces: FGR-70F, FGR-70F-3G4G

1. 1x USB Port
2. 2x RJ45 Serial Ports, COM1: Console, COM2: Data
3. 4x GE RJ45 LAN Ports (PORT3 and PORT4 supports bypass)
4. 2x GE RJ45 WAN Ports
5. 2x GE SFP Slots
6. 1x Digital I/O Module for Alarms
7. 2x DC Power Inputs (Redundant)
8. 1x Grounding Point



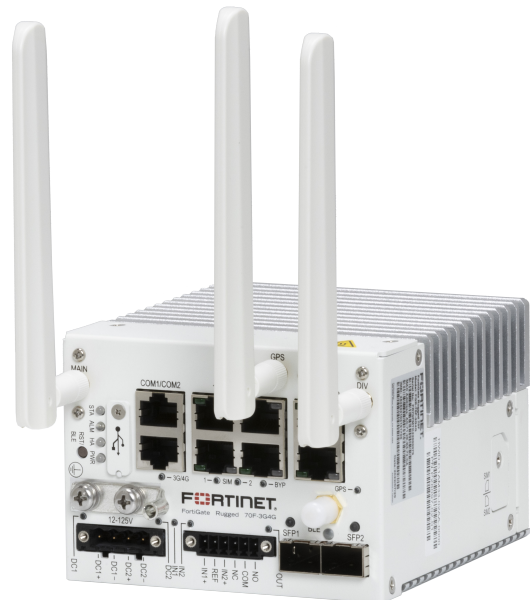
**FortiGate Rugged 70F**

### FortiGate Rugged 70F-3G4G



#### Interfaces: FGR-70F-3G4G

9. 2x SMA Antennae Connections for Cellular Wireless
10. 1x SMA Antenna Connection for GPS
11. 1x Integrated 3G/4G LTE Modem (Dual SIM - Active/Passive)



**FortiGate Rugged 70F-3G4G**

## Specifications

	FGR-60F	FGR-60F-3G4G	FGR-70F	FGR-70F-3G4G
<b>Interfaces and Modules</b>				
GE RJ45 Interfaces	4	4	6	6
Bypass GE RJ45 Port Pair	PORT4 and WAN1	PORT4 and WAN1	PORT3 and PORT4	PORT3 and PORT4
Dedicated GE SFP Slots	No	No	2	2
GE RJ45/SFP Shared Media Pairs	2	2	No	No
Serial Interface	1 DB9	1 DB9	1 RJ45	1 RJ45
USB (Client / Server)	1	1	1	1
RJ45 Console Port	1	1	1	1
Cellular Modem	No	3G / 4G LTE, GPS	No	3G / 4G LTE, GPS
Bluetooth Low Energy (BLE)	No	No	Yes	Yes
Transceivers Included	No	No	No	No
Processor	FortiSoC4	FortiSoC4	FortiSoC4	FortiSoC4
Trusted Platform Module (TPM)	Yes	Yes	Yes	Yes
Digital I/O Module (DIO)	No	No	Yes	Yes
Micro SD Card Slot	No	No	Yes	Yes
BLE	No	No	Yes	Yes
<b>System Performance and Capacity</b>				
IPv4 Firewall Throughput (1518* / 512 / 64 byte UDP packets)	6/6/5.95 Gbps	6/6/5.95 Gbps	8/8/8 Gbps	8/8/8 Gbps
Firewall Latency (64 byte, UDP)	3.10 µs	3.10 µs	6.71 µs	6.71 µs
Firewall Throughput (Packets Per Second)	8.9 Mpps	8.9 Mpps	12 Mpps	12 Mpps
Concurrent Sessions (TCP)	600 000	600 000	1 M	1 M
New Sessions/Second (TCP)	19 000	19 000	35 000	35 000
Firewall Policies	5000	5000	5000	5000
IPsec VPN Throughput (512 byte) <sup>1</sup>	3.5 Gbps	3.5 Gbps	6.5 Gbps	6.5 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	200	200	200	200
Client-to-Gateway IPsec VPN Tunnels	500	500	500	500
SSL-VPN Throughput	400 Mbps	400 Mbps	450 Mbps	450 Mbps
Concurrent SSL-VPN Users (Recommended Maximum)	100	100	100	100
SSL Inspection Throughput (IPS, avg. HTTPS) <sup>3</sup>	460 Mbps	460 Mbps	500 Mbps	500 Mbps
SSL Inspection CPS (IPS, avg. HTTPS) <sup>3</sup>	300	300	380	380
SSL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>	70 000	70 000	90 000	90 000
Application Control Throughput (HTTP 64K)	1.3 Gbps	1.3 Gbps	1.1 Gbps	1.1 Gbps
Virtual Domains (Default / Maximum)	10 / 10	10 / 10	10 / 10	10 / 10
Maximum Number of FortiAPs (Total / Tunnel)	30 / 10	30 / 10	64 / 32	64 / 32
Maximum Number of FortiTokens	500	500	500	500
Maximum Number of FortiSwitches	24	24	24	24
High Availability Configurations	Active-Active, Active-Passive, Clustering	Active-Active, Active-Passive, Clustering	Active-Active, Active-Passive, Clustering	Active-Active, Active-Passive, Clustering

\*Measured using 1518 byte UDP packets

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

<sup>1</sup> IPsec VPN performance test uses AES256-SHA256.

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

<sup>3</sup> SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

<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.

<sup>6</sup> AC adapter not supported.

<sup>7</sup> AC adapter not supported. Requires fabricated DC cables (refer to QuickStart Guide).

<sup>8</sup> DC cables are not included.



## Specifications

	FGR-60F	FGR-60F-3G4G	FGR-70F	FGR-70F-3G4G
<b>System Performance — Enterprise Traffic Mix</b>				
<b>IPS Throughput</b> <sup>2</sup>	950 Mbps	950 Mbps	975 Mbps	975 Mbps
<b>NGFW Throughput</b> <sup>2,4</sup>	550 Mbps	550 Mbps	950 Mbps	950 Mbps
<b>Threat Protection Throughput</b> <sup>2,5</sup>	500 Mbps	500 Mbps	580 Mbps	580 Mbps
<b>Dimensions and Power</b>				
<b>Height x Width x Length (inches)</b>	1.68 × 8.50 × 6.70	1.68 × 8.50 × 6.70	4.8 × 3.2 × 4.4	4.8 × 3.2 × 4.4
<b>Height x Width x Length (mm)</b>	42.7 × 216 × 170	42.7 × 216 × 170	122 × 80.5 × 111	122 × 80.5 × 111
<b>Weight</b>	3.85 lbs (1.75 kg)	4.06 lbs (1.84 kg)	2.87 lbs (1.3 kg)	2.87 lbs (1.3 kg)
<b>Form Factor</b>	Desktop/ DIN-rail/ Wall Mount	Desktop/ DIN-rail/ Wall Mount	DIN-rail	DIN-rail
<b>Antennae (Height x Width)</b>		205 mm x 25 mm		205 mm x 25 mm
<b>IP Rating</b>	IP20	IP20	IP40	IP40
<b>Power Supply</b> <sup>6,7,8</sup>	Redundant dual inputs, 2 pins per terminal block, supports negative (+12V to +125V DC) and positive ground (-12V to -125V DC) power sources, DC cables are not included.	Redundant dual inputs, 2 pins per terminal block, supports negative (+12V to +125V DC) and positive ground (-12V to -125V DC) power sources, DC cables are not included.	Redundant dual inputs, 2 pins per terminal block, supports negative (+12V to +125V DC) and positive ground (-12V to -125V DC) power sources, DC cables are not included.	Redundant dual inputs, 2 pins per terminal block, supports negative (+12V to +125V DC) and positive ground (-12V to -125V DC) power sources, DC cables are not included.
<b>Power Consumption (Average / Maximum)</b>	15 W / 21 W	16 W / 24 W	16 W / 18 W	18.3 W / 19.9 W
<b>Maximum Current</b>	12V DC / 2A	12V DC / 2A	12V DC / 1.5A	12V DC / 1.67A
<b>Heat Dissipation</b>	72 BTU/h	82 BTU/h	62 BTU/h	68 BTU/h
<b>Operating Environment</b>				
<b>Operating Temperature</b>	-40°–167°F (-40°–75°C)	-40°–167°F (-40°–75°C)	-40°–167°F (-40°–75°C)	-40°–167°F (-40°–75°C)
<b>Storage Temperature</b>	-40°–167°F (-40°–75°C)	-40°–167°F (-40°–75°C)	-40°–167°F (-40°–75°C)	-40°–167°F (-40°–75°C)
<b>Humidity</b>	5%–95% non-condensing	5%–95% non-condensing	5%–95% non-condensing	5%–95% non-condensing
<b>Operating Altitude</b>	Up to 10 000 ft (3048 m)	Up to 10 000 ft (3048 m)	Up to 10 000 ft (3048 m)	Up to 10 000 ft (3048 m)

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

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## Specifications

	FGR-60F	FGR-60F-3G4G	FGR-70F	FGR-70F-3G4G
<b>Industry Compliance and Certifications</b>				
<b>Electric Power Industry</b>	IEC 61850-3 and IEEE 1613 Certified	IEC 61850-3 and IEEE 1613 Certified	IEC 61850-3 and IEEE 1613 Certified	IEC 61850-3 and IEEE 1613 Certified
<b>EMC</b>	EN 55032:2015, Class A EN 55035: 2017 EN IEC 61000-6-4:2019 IEC 61850-3:2013	EN 55032:2015, Class A EN 55035: 2017 EN IEC 61000-6-4:2019 IEC 61850-3:2013 EN 301 489-1 V2.2.3 Draft EN 301 489-52 V1.1.0 (2016-11)	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.2.4 (2020-09) ETSI EN 301 489-19 V2.1.1 (2019-04) ETSI EN 301 489-52 V1.2.1 (2021-11) ETSI EN 301 908-1 V15.1.1 (2021-09) EN 55032:2015, Class A IEC 61850-3:2013	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.2.4 (2020-09) ETSI EN 301 489-19 V2.1.1 (2019-04) ETSI EN 301 489-52 V1.2.1 (2021-11) ETSI EN 301 908-1 V15.1.1 (2021-09) EN 55032:2015, Class A IEC 61850-3:2013
<b>Health and Safety</b>	IEC 62368-1:2014, 2nd Ed. EN 62368-1:2014 IEC 62368-1:2018, 3rd Ed. EN IEC 62368-1:2020	IEC 62368-1:2014, 2nd Ed. EN 62368-1:2014 IEC 62368-1:2018, 3rd Ed. EN IEC 62368-1:2020	IEC 62368-1:2014, 2nd Ed. EN 62368-1:2014 IEC 62368-1:2018, 3rd Ed. EN IEC 62368-1:2020	IEC 62368-1:2014, 2nd Ed. EN 62368-1:2014 IEC 62368-1:2018, 3rd Ed. EN IEC 62368-1:2020
<b>Maritime Industry<sup>1</sup></b>	IEC 60945:2002 4th Ed. DNV GL Type Approved	IEC 60945:2002 4th Ed. DNV GL Type Approved		
<b>Regulatory Compliance</b>	FCC Part 15 Class A, RCM, VCCI Class A, CE, UL/cUL, CB	FCC Part 15 Class A, RCM, VCCI Class A, CE, UL/cUL, CB	FCC Part 15 Class A, RCM, VCCI Class A, CE, UL/cUL, CB	FCC Part 15 Class A, RCM, VCCI Class A, CE, UL/cUL, CB
<b>RF</b>		Draft ETSI EN 301 489-19 V2.2.0 (2020-09) ETSI EN 301 489-52 V1.2.1 (2021-11) EN 301 908-1 V13.1.1 (2019-11) EN 301 908-2 V13.1.1 EN 301 908-13 V13.1.1 EN 303 413 V1.2.1 (2021-04)	ETSI EN 300 328 V2.2.2 (2019-07) EN IEC 62311:2020 EN 50665:2017 FCC Part 15 Subpart C 15.247 FCC 47 CFR Part 2.1091 ISED RSS-247 Issue 2 RSS-102 Issue 5	ETSI EN 300 328 V2.2.2 (2019-07) EN 301 908-1 V13.1.1 (2019-11) EN 301 908-2 V13.1.1 EN 301 908-13 V13.1.1 EN 303 413 V1.2.1 (2021-04) EN IEC 62311:2020 EN 50665:2017 FCC Part 15 Subpart C 15.247 FCC 47 CFR Part 2.1091 ISED RSS-247 Issue 2 RSS-102 Issue 5
<b>RoHS</b>	EN IEC 6300:2018 EN 50581:2012	EN IEC 6300:2018 EN 50581:2012	EN IEC 6300:2018 EN 50581:2012	EN IEC 6300:2018 EN 50581:2012
<b>Rolling Stock Industry</b>	EMC, Shock and Vibration Compliant EN 50121-1:2017 EMC EN 50121-4:2016 EMC IEC60068-2-27:2008 Shock IEC 60068-2-6:2007 Vibration	EMC Compliant EN 50121-1:2017 EMC EN 50121-4:2016 EMC	EN 50155:2017 EMC, Shock, and Vibration Certified	EN 50155:2017 EMC, Shock, and Vibration Certified

1. Maritime certification is only available for Gen3 release of FGR-60F and FGR-60F-3G4G.

	FGR-60F-3G4G	FGR-70F-3G4G
<b>Cellular Wireless Regional Compatibility</b>		
<b>Maximum Tx Power</b>	20 dBm	20 dBm
<b>Regions</b>	All Regions	All Regions
<b>Modem Model</b>	Sierra Wireless EM7565 (2 SIM Slots, Active/Passive)	Sierra Wireless EM7565 (2 SIM Slots, Active/Passive)
<b>LTE</b>	B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B18, B19, B20, B26, B28, B29, B30, B32, B41, B42, B43, B46, B48, B66	B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B18, B19, B20, B26, B28, B29, B30, B32, B41, B42, B43, B46, B48, B66
<b>UMTS/HSPA+</b>	B1, B2, B3, B4, B5, B6, B8, B9, B29	B1, B2, B3, B4, B5, B6, B8, B9, B29
<b>WCDMA</b>	No	No
<b>CDMA 1xRTT/EV-DO Rev A</b>	No	No
<b>GSM/GPRS/EDGE</b>	No	No
<b>Module Certifications</b>	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB
<b>Diversity</b>	Yes	Yes
<b>MIMO</b>	Yes	Yes
<b>GNSS Bias</b>	Yes	Yes



## Supported Industrial Protocols

### FortiGuard Industrial Security Service

- |                                    |                              |                                      |
|------------------------------------|------------------------------|--------------------------------------|
| • Allen-Bradley DF1                | • GE SRTP (GE Fanuc)         | • OPC AE                             |
| • Allen-Bradley PCCC               | • HART-IP                    | • OPC DA                             |
| • BACnet                           | • HL7                        | • OPC HDA                            |
| • CC-Link                          | • IEC 60870-5-104 (IEC 104)☰ | • OPC UA                             |
| • CN/IP CEA-852                    | • IEC 60870-6/TASE.2 (ICCP)  | • OpenADR                            |
| • CoAP                             | • IEC 61850 MMS              | • OSIsoft PI                         |
| • Common Industrial Protocol (CIP) | • IEC 62056 DLMS/COSEM       | • Profinet CBA                       |
| • DICOM                            | • IEC TR 61850-90-5 R-GOOSE  | • Profinet IO                        |
| • Digi ADDP                        | • IEC TR 61850-90-5 R-SV     | • RealPort DNP3☰                     |
| • Digi RealPort (Net C/X)          | • IEEE 1278.2 DIS            | • Remote Operations Controller (ROC) |
| • Direct Message Profile           | • IEEE C37.118 Synchrophasor | • Rockwell FactoryTalk               |
| • DNP3                             | • ISO 9506 MMS               | • RTPS                               |
| • ECHONET Lite                     | • KNXnet/IP (ElBnet/IP)      | • SafetyNET p                        |
| • ECOM100                          | • LonTalk IEC14908-1 CNP     | • Schneider UMAS                     |
| • ELCOM 90                         | • Mitsubishi MELSEC          | • Siemens LOGO                       |
| • Emerson DeltaV                   | • Modbus TCP☰                | • Siemens S7                         |
| • Ether-S-Bus                      | • Moxa Modbus RTU☰           | • Siemens S7 1200                    |
| • Ether-S-I/O                      | • Moxa UDP Device Discovery  | • Siemens S7 Plus                    |
| • EtherCAT                         | • MQTT                       | • Siemens SIMATIC CAMP               |
| • Ethernet POWERLINK               | • MTConnect                  | • STANAG 4406 Military Messaging     |
| • EtherNet/IP                      | • Niagara Fox                | • STANAG 5066                        |
| • FactorySuite NMXSVC              | • oBIX                       | • Triconex TriStation                |
| • FL-net                           | • OCPP                       | • Veeder-Root ATG Access             |
| • GE EGD                           | • Omron FINS                 | • Vnet/IP                            |

☰ Additional parameters supported for the signatures in the GUI (requires FortiOS v6.4 or above).

Visit <https://www.fortiguards.com/services/is> to view the latest list of industrial applications and protocols included in the FortiGuard Industrial Security Service.





## Ordering Information

Product	SKU	Description
<b>FortiGate Rugged 60F</b>	FGR-60F	Ruggedized, indoor, IP20, 4x GE RJ45 ports, 2x shared media ports (supports, 2x GE RJ45 ports or 2x SFP slots), 1x GE RJ45 bypass port pair (between PORT4 and WAN1), 1x RJ45 serial port (console), 1x DB9 serial port (data), 1x USB port, dual power inputs.
<b>FortiGate Rugged 60F-3G4G</b>	FGR-60F-3G4G	Ruggedized, indoor, IP20, 4x GE RJ45 ports, 2x shared media ports (supports, 2x GE RJ45 ports or 2x SFP slots), 1x GE RJ45 bypass port pair (between PORT4 and WAN1), 1x RJ45 serial port (console), 1x DB9 serial port (data), 1x USB port, embedded 3G/4G LTE wireless WAN module (includes, 2 SIM slots - Active/Passive, 2x external SMA WWAN antennae), Passive GPS (includes, 1x external SMA GPS antenna), dual power inputs.
<b>FortiGate Rugged 70F</b>	FGR-70F	Ruggedized, indoor, IP40, 4x GE RJ45 LAN ports, 1x GE RJ45 bypass port pair (between PORT3 and PORT4), 2x GE RJ45 WAN ports, 2x SFP slots, 1x RJ45 serial port (data), 1x RJ45 serial port (console), 1x USB port, 1x MicroSD card slot, dual power inputs.
<b>FortiGate Rugged 70F-3G4G</b>	FGR-70F-3G4G	Ruggedized, indoor, IP40, 4x GE RJ45 LAN ports, 1x GE RJ45 bypass port pair (between PORT3 and PORT4), 2x GE RJ45 WAN ports, 2x SFP slots, 1x RJ45 serial port (data), 1x RJ45 serial port (console), 1x USB port, 1x MicroSD card slot, embedded 3G/4G LTE wireless WAN module (includes, 2x SIM slots - Active/Passive, 2x external SMA WWAN antennae), Passive GPS (includes, 1x external SMA GPS antenna), dual power inputs.
<b>Optional Accessories</b>		
<b>1 GE SFP RJ45 transceiver module, -40°~85°C operation</b>	FN-TRAN-GC	1 GE SFP RJ45 transceiver module for systems with SFP and SFP/SFP+ slots.
<b>1 GE SFP LX transceivers, SMF, -40°~85°C operation</b>	FN-TRAN-LX	1 GE SFP LX transceiver module, -40°C~85°C, over SMF, for all systems with SFP and SFP/SFP+ slots.
<b>1 GE SFP SX transceivers, MMF, -40°~85°C operation</b>	FR-TRAN-SX	1 GE SFP SX transceiver module, -40°C~85°C, over MMF, for all systems with SFP and SFP/SFP+ slots.
<b>1 GE SFP transceivers, 90 km range, -40~85°C operation</b>	FR-TRAN-ZX	1 GE SFP transceivers, -40°C~85°C operation, 90 km range for all systems with SFP slots.
<b>100base-FX SFP transceiver module</b>	FS-TRAN-FX	100 Mb multimode SFP transceiver module, -40° to 85°C, 2 km range for systems with SFP Slots and capable of 10/100 Mb mode selection.
<b>VDLS2/ADSL2 SFP transceiver module</b>	FN-TRAN-DSL	VDLS2/ADSL2 SFP transceiver module, for systems with SFP and SFP+ slots.

## OT Ordering Guide

Fortinet's OT ordering guide offers high-level mapping of solutions aligned with the Purdue Model based deployment architecture, allowing end-users and partners to select suitable solutions for their OT cybersecurity requirements. It contains a non-exhaustive list of the best-selling Fortinet products suited for OT cybersecurity use-cases and requirements.

Click [here](#) to access the ordering guide.

## OT Security Solutions Hub

Visit the [OT Security Solutions Hub](#) for additional technical information on Fortinet solutions for operational technology.



## FortiGuard Protection Subscriptions

Service Category	Service Offering	A-la-carte	Bundles		
			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		•	•	
	AI-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) <sup>1</sup>	•			
	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	•			
	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 Software Support	FortiCare Essentials	•			
	FortiCare Premium	•	•	•	•
	FortiCare Elite	•			
Base Services	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. 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.

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## 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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