FortiGate® 7000E Series

FortiGate 7060E, 7040E, and 7030E

Next Generation Firewall
Segmentation
IPS
Mobile Security

The FortiGate 7000E series delivers high performance next generation firewall (NGFW) capabilities for large enterprises and service providers. With multiple high-speed interfaces, high-port density, and high-throughput, ideal deployments are at the enterprise edge, hybrid data center core, and across internal segments. Leverage industry-leading IPS, SSL inspection, and advanced threat protection to optimize your network's performance. 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, ICSA, 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

Model	FG-7060E	FG-7040E	FG-7030E
Firewall	630 Gbps	315 Gbps	155 Gbps
IPS	120 Gbps	60 Gbps	60 Gbps
NGFW	100 Gbps	50 Gbps	50 Gbps
Threat Protection	80 Gbps	40 Gbps	35 Gbps
Network Interfaces	Multiple 10 GE SFP+/SFP, 40 GE QSFP+, 100 GE CFP2/QSFP28	Multiple 10 GE SFP+/SFP, 40 GE QSFP+, 100 GE CFP2/QSFP28	Multiple 10 GE SFP+/SFP, 40 GE/100 GE QSFP28

Refer to the specifications table for details

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 security effectiveness, 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

Segmentation

- Segmentation that adapts to any network topology, delivering end-to-end security from the branch level to data centers and extending to multiple clouds
- Reduce security risks by improving network visibility from the components of the Fortinet Security Fabric, which adapt access permissions to current levels of trust and enforce access control effectively and efficiently
- Delivers defense in depth security powered by high-performance L7 inspection and remediation by Fortinet's SPU, while delivering third party validated TCO of per protected Mbps
- Protects critical business applications and helps implement any compliance requirements without network redesigns

IPS

- Purpose-built security processors delivering industry validated IPS performance with high throughput and low latency
- Deploy virtual patches at the network level to protect against network exploitable vulnerabilities and optimize network protection time
- Deep packet inspection at wire speeds offers unparalleled threat visibility into network traffic including traffic encrypted with the latest TLS 1.3
- Proactively block newly discovered sophisticated attacks in real-time with advanced threat protection provided by the intelligence services of the Fortinet Security Fabric

Mobile Security for 4G, 5G, and IOT

- SPU accelerated, high performance CGNAT and IPv4 and IPv6 traffic, for 4G SGi LAN and 5G N6 security
- RAN Access Security with highly scalable and best performing IPsec aggregation and control security gateway (SecGW)
- User plane security enabled by full Threat Protection and visibility into GTP-U inspection
- 4G and 5G security for user and data plane traffic SCTP, GTP-U/C and SIP that provides protection against attacks
- 4G and 5G cores IoT signaling storm protection
- High-speed interfaces to enable deployment flexibility
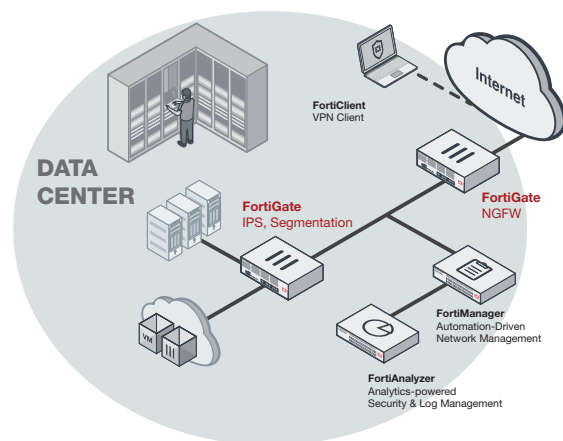
FortiGate 7000E deployment in data center
(NGFW and IPS, Intent-based Segmentation)

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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 overs 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
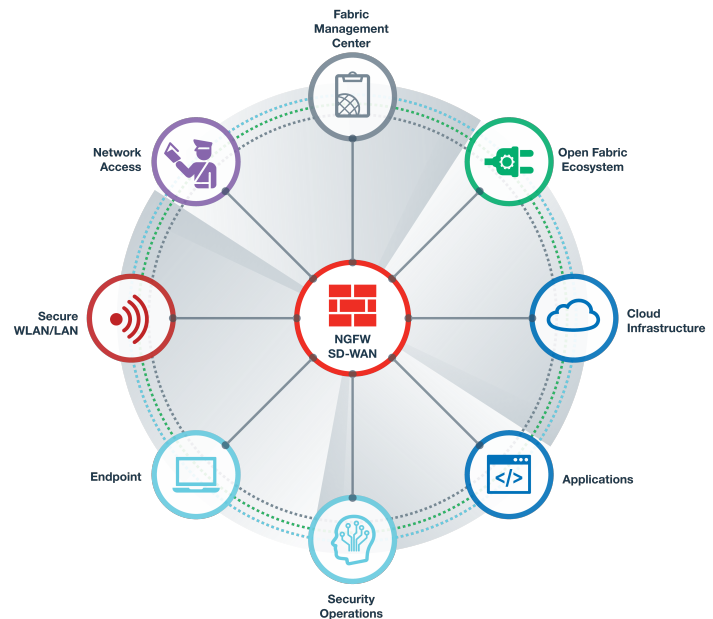
FortiOS

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.
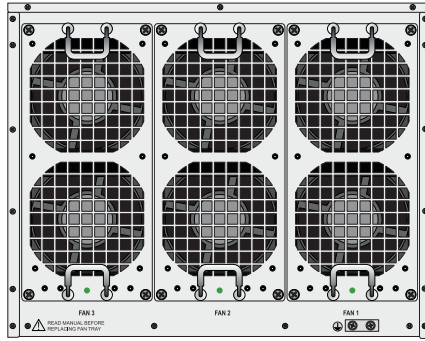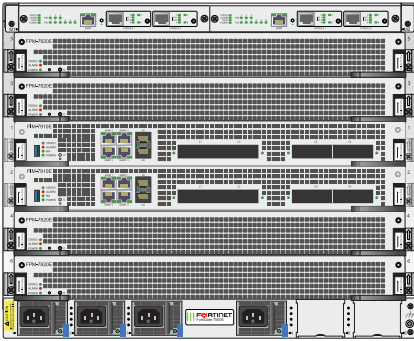
FortiCare™ Support Services

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.
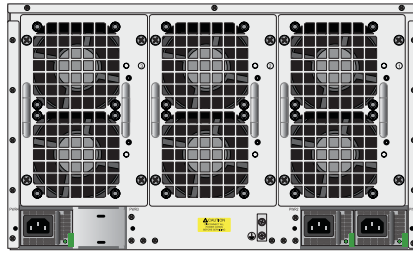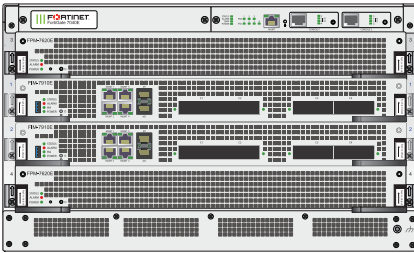
For more information, please refer to forti.net/fortiguard and forti.net/forticare

Hardware

FortiGate 7060E

Next Generation 8U 19-inch 6-slot rack mount chassis supporting up to 4x Fortinet Processor Modules (FPM) and 2x Fortinet Interface Modules (FIM).

FortiGate 7040E and 7030E

The FG-7040E is a Next Generation 6U 19-inch 4-slot rack mount chassis with 2x Fortinet Processor Modules (FPM) and 2x Fortinet Interface Modules (FIM). The FG-7030E 3-slot rack mount chassis comes with 2x FPM and 1x bundled FIM.

	FORTIGATE 7060E / 7060E-DC*	FORTIGATE 7040E / 7040E-DC	FORTIGATE 7030E
Hardware Specifications			
Fortinet Processor Module (FPM) Slots	4	2	2
Fortinet Interface Module (FIM) Slots	2	2	1
Shelf Manager	2	1	1
System Performance and Capacity			
Firewall Throughput (1518 / 512 / 64 byte, UDP)	630 / 630 / 340 Gbps	315 / 310 / 200 Gbps	155 / 155 / 155 Gbps
Firewall Latency (64 byte, UDP)	7 μs	7 μs	7 μs
Firewall Throughput (Packet per Second)	510 Mpps	300 Mpps	220 Mpps
Concurrent Sessions (TCP)	320 Million	160 Million	160 Million
New Sessions/Sec (TCP)	1.8 Million	950,000	900,000
Firewall Policies	200,000	200,000	200,000
IPsec VPN Throughput (512 byte)	100 Gbps	100 Gbps	40 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	16,000	16,000	16,000
Client-to-Gateway IPsec VPN Tunnels	64,000	64,000	64,000
SSL-VPN Throughput	15 Gbps	15 Gbps	15 Gbps
Concurrent SSL-VPN Users (Recommended Maximum)	48,000	48,000	48,000
IPS Throughput (HTTP / Enterprise Mix) [1]	360 / 120 Gbps	140 / 60 Gbps	90 / 60 Gbps
SSL Inspection Throughput [2]	79.9 Gbps	39.9 Gbps	39.9 Gbps
SSL Inspection CPS (IPS, avg. HTTPS) [3]	47,000	32,500	32,500
SSL Inspection Concurrent Session (IPS, avg. HTTPS) [3]	24 Million	12 Million	12 Million
Application Control Throughput [3]	160 Gbps	80 Gbps	65 Gbps
NGFW Throughput [4]	100 Gbps	50 Gbps	50 Gbps
Threat Protection Throughput [5]	80 Gbps	40 Gbps	35 Gbps
CAPWAP Throughput	N/A	N/A	N/A
Virtual Domains (Default / Maximum)	10 / 500	10 / 500	10 / 500
Maximum Number of FortiSwitches Supported	256	256	256
Maximum Number of FortiAPs (Total / Tunnel Mode)	N/A	N/A	N/A
High Availability Configurations	A/A and A/P	A/A and A/P	A/A and A/P
Dimensions			
Height x Width x Length (inches)	14.0 x 17.3 x 25.6	10.5 x 17.3 x 25.6	10.5 x 17.3 x 25.6
Height x Width x Length (mm)	355.6 x 440 x 651	266.7 x 440 x 650	266.7 x 440 x 650
Weight	210.2 lbs (95.4 kg)	153.3 lbs (69.6 kg)	134.9 lbs (61.3 kg)
Form Factor (supports EIA/non-EIA standards)	8 RU	8 RU	6 RU

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System

	FORTIGATE 7060E / 7060E-DC*	FORTIGATE 7040E / 7040E-DC	FORTIGATE 7030E
Power and Environment			
Power Required	AC (configured with 4 PSUs in a 3+1 redundant configuration, an additional 2 PSUs can be added for additional redundancy)	AC (configured with 3 PSUs in a 2+1 redundant configuration, an additional PSU can be added for additional redundancy)	AC (configured with 3 PSUs in a 2+1 redundant configuration, an additional PSU can be added for additional redundancy)
Power Consumption (Maximum / Average) **	3277 / 2330 W	2500 / 1800 W	1940 / 1390 W
AC Current (Maximum)	12A@100V, 10A@240V	12A@100V, 10A@240V	12A@100V, 10A@240V
Heat Dissipation (Maximum) **	11,184 BTU/h	8,530 BTU/h	6,619 BTU/h
DC Power Supply	-48V DC	-48V DC	–
DC Current (Maximum)	30A per feed (3+3)	30A per feed (2+2)	–
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)	32–104°F (0–40°C)
Storage Temperature	-31–158°F (-35–70°C)	-31–158°F (-35–70°C)	-31–158°F (-35–70°C)
Humidity	20–90% non-condensing	20–90% non-condensing	20–90% non-condensing
Compliance			
Certifications	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB

* Performance specifications for FG-7060 are based on 4 FPM combination.

** Based on all default included components.

Note: All performance values are "up to" and vary depending on system configuration. IPsec VPN performance is based on 512 byte UDP packets using AES-256+SHA1. 1. IPS performance is measured using 1 Mbyte HTTP and Enterprise Traffic Mix. 2. SSL Inspection is measured with IPS enabled and HTTP traffic, using TLS v1.2 with AES256-SHA. 3. Application Control performance is measured with 64 Kbytes HTTP traffic. 4. NGFW performance is measured with IPS and Application Control enabled, based on Enterprise Traffic Mix. 5. Threat Protection performance is measured with IPS and Application Control and Malware protection enabled, based on Enterprise Traffic Mix.

For complete, up-to-date and detailed feature set, please refer to the Administration Handbook and FortiOS Datasheet.
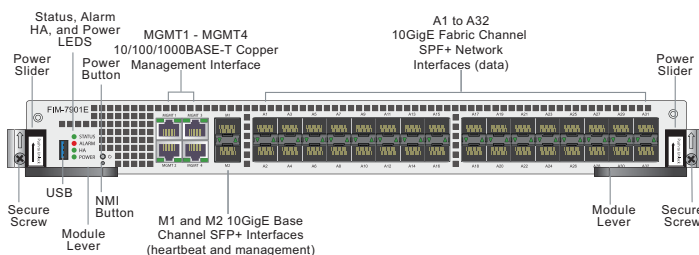
Modules

Fortinet Processor Module 7620E

Latest purpose-built SPU CP9 accelerated processor module with superior content processing throughput and protection. Runs on FortiOS 5 — the most powerful security operating system in the world.
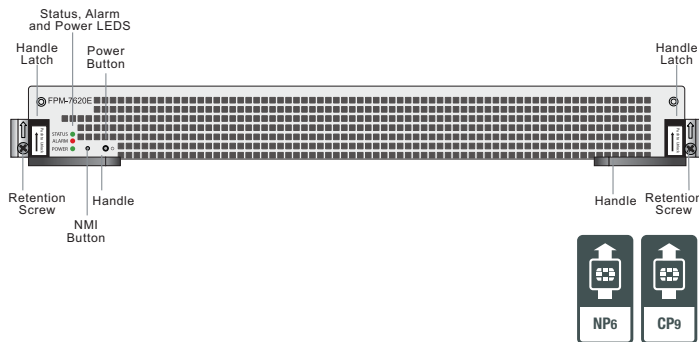
|	FPM-7620E
Power and Environment	
Power Consumption (Average / Maximum)	320 / 410 W
Heat Dissipation (Average)	1,395 BTU/h
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-31–158°F (-35–70°C)
Humidity	20–90% non-condensing
Compliance	
Certifications	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB

Fortinet Interface Module 7901E

High-performance, SPU DP2 accelerated networking blade with 32x GE/10 GE SFP/+ slots.
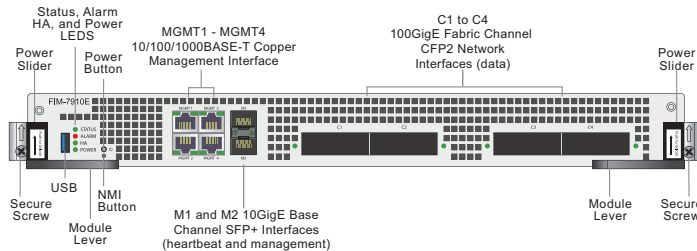

Fortinet Interface Module 7904E

High-performance, SPU DP2 accelerated networking blade with 8x 40 GE QSFP+ slots.
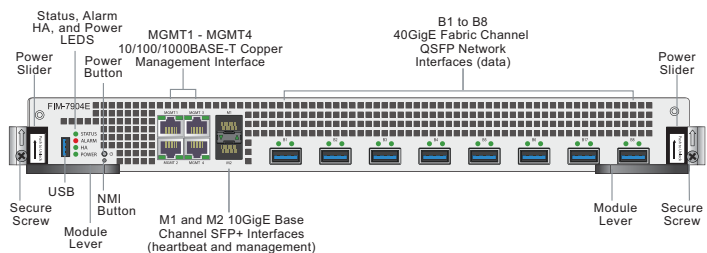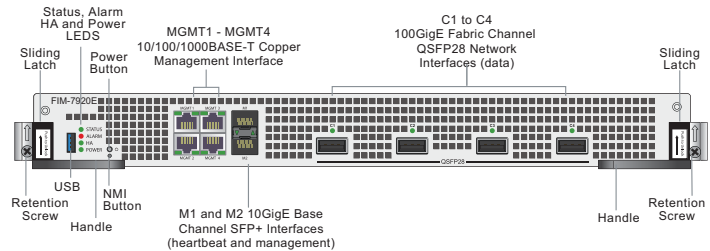
Modules

Fortinet Interface Module 7910E

High-performance, SPU DP2 accelerated networking blade with 4x 100 GE CFP2 slots.

Fortinet Interface Module 7920E

High-performance, SPU DP2 accelerated networking blade with 4x 100 GE QSFP28 slots.

	FIM-7901E	FIM-7904E	FIM-7910E	FIM-7920E
Interfaces				
Network Interfaces	32x GE/10 GE SFP/+	8x 40 GE QSFP+	4x 100 GE CFP2	4x 100 GE QSFP28
Base Channel Interfaces	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+
Management Interfaces	4x GE RJ45	4x GE RJ45	4x GE RJ45	4x GE RJ45
Included Transceivers	2x SFP+ SR	2x SFP+ SR	2x SFP+ SR	2x SFP+ SR
Power and Environment				
Power Consumption (Average / Maximum)	260 / 450 W	260 / 450 W	260 / 450 W	410 / 460 W
Heat Dissipation	1531 BTU/h	1531 BTU/h	1531 BTU/h	1565 BTU/h
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)	32–104°F (0–40°C)	32–104°F (0–40°C)
Storage Temperature	-31–158°F (-35–70°C)	-31–158°F (-35–70°C)	-31–158°F (-35–70°C)	-31–158°F (-35–70°C)
Humidity	20–90% non-condensing	20–90% non-condensing	20–90% non-condensing	20–90% non-condensing
Compliance				
Certifications	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB

Bundle Matrix

SKU	COMPONENTS					
Bundle	Chassis	Processing Module	I/O Module 1	I/O Module 2	Power Supplies	Services & Licenses
FG-7030E-SFP10G	FG-7030E (2x FPMs, 1x FIM)	2x FPM-7620E	Select from FIM-7901E-C, FIM-7904E-C, FIM-7910E-C, FIM-7920E-C	Select from FIM-7901E-C, FIM-7904E-C, FIM-7910E-C, FIM-7920E-C	3x PSU, 1x PSU Optional	Chassis-based pricing — Individual and bundled FortiGuard security services and FortiCare support subscription services: Threat Protection Bundle, UTM Bundle, Enterprise Bundle and FortiCare360
FG-7030E-QSFP28	FG-7030E (2x FPMs, 1x FIM)	2x FPM-7620E	Select from FIM-7901E-C, FIM-7904E-C, FIM-7910E-C, FIM-7920E-C	Select from FIM-7901E-C, FIM-7904E-C, FIM-7910E-C, FIM-7920E-C	3x PSU, 1x PSU Optional	Chassis-based pricing — Add on licenses such as VDOM and Endpoint Compliance
FG-7040E-8	FG-7040E (2x FPMs, 2x FIMs)	2x FPM-7620E	Select from FIM-7901E-C, FIM-7904E-C, FIM-7910E-C, FIM-7920E-C	Select from FIM-7901E-C, FIM-7904E-C, FIM-7910E-C, FIM-7920E-C	3x PSU, 1x PSU Optional	
FG-7060E-8	FG-7060E (2x FPMs, 2x FIMs)	2x FPM-7620E 2x FPM-7620E optional	Select from FIM-7901E-C, FIM-7904E-C, FIM-7910E-C, FIM-7920E-C	Select from FIM-7901E-C, FIM-7904E-C, FIM-7910E-C, FIM-7920E-C	4x PSU, 2x PSU Optional	

NOTE: FIM-79XXE-C are only meant to be used with the FG7040E-8/FG-7040E-8-DC/FG7060E-8/FG7060E-8-DC Bundles. Please use FIM-79XXE for ordering spares.

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Order Information

Product	SKU	Description
FortiGate 7030E-SFP10G	FG-7030E-SFP10G	6U 3-slot chassis with 2x FPM-7620E processor modules, 1x FIM-7901E module with 32x 10 GE SFP+ slots, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7030E-QSFP28	FG-7030E-QSFP28	6U 3-slot chassis with 2x FPM-7620E processor modules, 1x FIM-7920E module with 4x 100 GE QSFP28 slots, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-8	FG-7040E-8	6U 4-slot chassis with 2x FPM-7620E processor modules, 2x FIM-79xxE-C specified at purchase, 1x manager module and 3x hot swappable redundant PSU.
FortiGate 7040E-8-DC	FG-7040E-8-DC	6U 4-slot chassis with 2x FPM-7620E processor modules, 2x FIM-79xxE-C specified at purchase, 1x manager module and 3x hot swappable redundant DC PSU.
FortiGate 7060E-8	FG-7060E-8	8U 6-slot chassis with 2x FPM-7620E processor modules, 2x FIM-79xxE-C specified at purchase, 2x manager module and 4x hot swappable redundant PSU.
FortiGate 7060E-8-DC	FG-7060E-8-DC	8U 6-slot chassis with 2x FPM-7620E processor modules, 2x FIM-79xxE-C specified at purchase, 2x manager modules and 4x hot swappable redundant DC-DC PSU.
FortiGate 7060E-DC Chassis	FG-7060E-DC-Chassis	FG-7060E chassis including 2x system management modules, 3x fan modules and 4x DC PSU.
OPTIONAL / SPARE ITEMS	**SKU**	**DESCRIPTION**
Processor Module		
FPM-7620E Module	FPM-7620E	Hot swappable processor module for 7000E series — SPU NP6 and CP9 hardware accelerated.
I/O Module		
FIM-7901E Module*	FIM-7901E	Hot swappable I/O module for 7000E series — 4x GE RJ45 management ports and 34x 10 GE SFP+ slots.
FIM-7904E Module*	FIM-7904E	Hot swappable I/O module for 7000E series — 4x GE RJ45 management ports, 2x 10 GE SFP+ slots and 8x 40 GE QSFP+.
FIM-7910E Module*	FIM-7910E	Hot swappable I/O module for 7000E series — 4x GE RJ45 management ports, 2x 10 GE SFP+ slots and 4x 100 GE CFP2 slots.
FIM-7920E Module*	FIM-7920E	Hot swappable I/O module for 7000E series — 4x GE RJ45 management ports, 2x 10 GE SFP+ slots and 4x 100 G QSFP28 slots.
Transceivers		
100 GE CFP2 Transceivers, Short Range	FG-TRAN-CFP2-SR10	100 GE CFP2 transceivers, 10 channel parallel fiber, short range for all systems with CFP2 slots.
100 GE CFP2 Transceivers, Long Range	FG-TRAN-CFP2-LR4	100 GE CFP2 transceivers, long range, over single mode fiber, for all systems with CFP2 slots.
40 GE QSFP+ Transceivers, Short Range	FG-TRAN-QSFP+SR	40 GE QSFP+ transceivers, short range for all systems with QSFP+ slots.
40 GE QSFP+ Transceivers, Long Range	FG-TRAN-QSFP+LR	40 GE QSFP+ transceivers, long range for all systems with QSFP+ 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.
10 GE SFP+ Transceiver Module, Long Range	FG-TRAN-SFP+LR	10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.
10 GE Copper SFP+ Transceiver Module, up to 30m	FS-TRAN-SFP+GC	10 GE copper SFP+ RJ45 transceiver. For FortiSwitch only, up to 30m.
100 GE QSFP28 Transceivers, 4 Channel Parallel Fiber, Short Range	FG-TRAN-QSFP28-SR4	100 GE QSFP28 transceivers, 4 channel parallel fiber, short range for all systems with QSFP28 slots.
100 GE QSFP28 Transceivers, 4 Channel Parallel Fiber, Long Range	FG-TRAN-QSFP28-LR4	100 GE QSFP28 transceivers, 4 channel parallel fiber, long range for all systems with QSFP28 slots.
Power Supply		
Power Supply Module	FG-7060E-PS-DC	1500W DC/DC 48–72V 12V125A/5VSB4A, AFB, power supply modules for FG-7060E.

* Each FIM is packed individually and comes with 2x 10 GE SFP+ SR transceivers at no charge.

NOTE: All optional/spare components are for replacement usage and should not be used to assemble a bundle as only bundles have the necessary subscriptions.

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	UTM	Threat Protection
FortiCare	ASE [1]	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	•	•		
FortiCASB SaaS-only Service	•	•		
FortiConverter Service	•			
SD-WAN Cloud Assisted Monitoring [2]	•			
SD-WAN Overlay Controller VPN Service [2]	•			
FortiAnalyzer Cloud [2]	•			
FortiManager Cloud [2]	•			

1. 24x7 plus Advanced Services Ticket Handling   2. Available when running FortiOS 6.2

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