

# FortiGate® 7000E Series Solution

FortiGate 7040E and 7060E Bundles

The Fortinet Enterprise Firewall Solution delivers end-to-end network security with one platform, one network security operating system and unified policy management with a single pane of glass — for **the industry’s best protection against the most advanced security threats and targeted attacks.**

Delivering up to 100 Gbps of NGFW throughput, the FortiGate 7000 series are the fastest and most advanced chassis-based NGFW solution available today.



## Security Fabric Integration

FortiGate appliances, interconnected with the Fortinet Security Fabric, form the backbone of the Fortinet Enterprise Solution.



## Deployment Modes

- Next Generation Firewall
- Internal Segmentation Firewall
- Data Center Firewall



## Hardware Acceleration

SPU CP9 and NP6

## Bundles

	FG-7060E	FG-7040E
Firewall Throughput	630 Gbps	315 Gbps
IPS Throughput	120 Gbps	60 Gbps
NGFW Throughput	100 Gbps	50 Gbps
Threat Protection Throughput	80 Gbps	40 Gbps



## Third-Party Certifications



Superior Interface Flexibility with support for 10 GE SFP+, 40 GE QSFP+ as well as 100 GE CFP2/QSFP28 interfaces

# HIGHLIGHTS

## Key Features and Benefits



Modular Security Gateway	Hot swappable modules and chassis upgradeability for easy expansion.
Industry Leading NGFW Performance	Optimized for 100+ Gbps of NGFW performance in the core network.
Simplified Management and Licensing	Centralized licensing that is simple and easy to manage.
Virtual Domains for Segmentation	Multiple independent virtual domains (VDMs), each with customized security policies, logging and controls.
Security Processor CP9	Powered by the latest generation of security processor technology for maximum security, higher performance, less space and less power.
Single Pane of Glass Management	Single pane of glass for manageability and visibility.

## DEPLOYMENT



### Next Generation Firewall (NGFW)

- Security gateway to the Internet for enterprises.
- Enforce security policies with granular control and visibility of users and devices for thousands of discrete applications.
- Identify and stop threats with powerful intrusion prevention beyond port and protocol that examines the actual content of your network traffic.



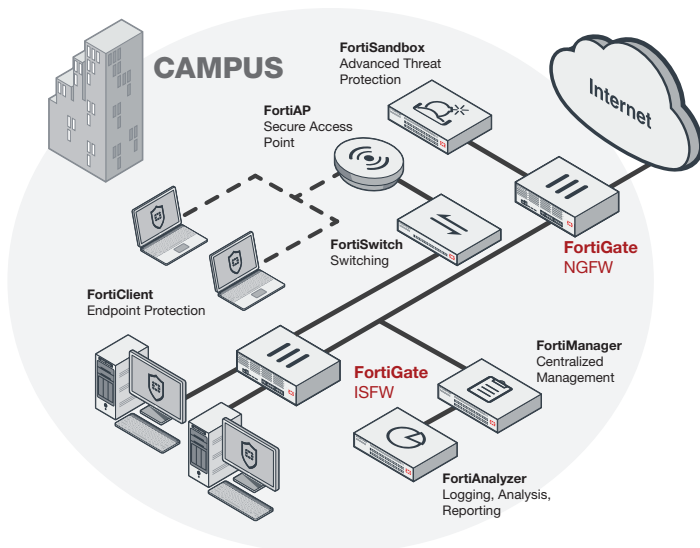
### Internal Segmentation Firewall (ISFW)

- Segmentation solution for end-to-end protection against threats while meeting compliance requirements.
- High port density and accelerated traffic processing capacity, to protect multiple segments without compromising performance.
- Deploy transparently and rapidly into existing environments with minimal disruption.

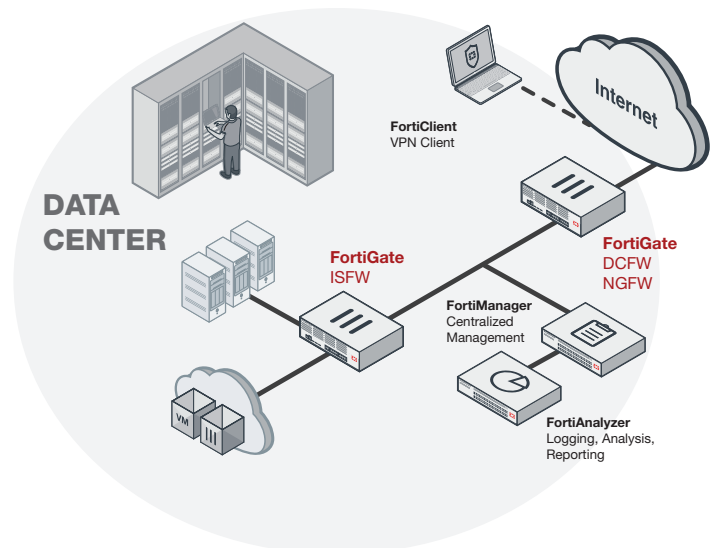


### Data Center Firewall (DCFW)

- High availability, high throughput and low latency firewall for data center edge and core
- High session scale for accommodating large network and user traffic for internet and cloud facing data centers.
- High speed Interfaces for future-proof connectivity while compact size contributes to greener data centers.

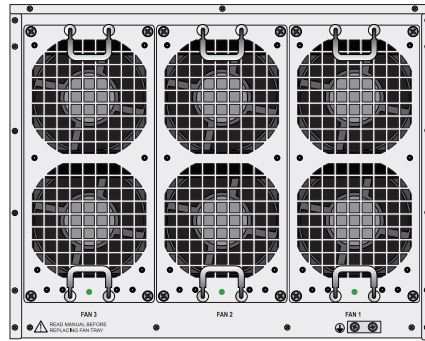
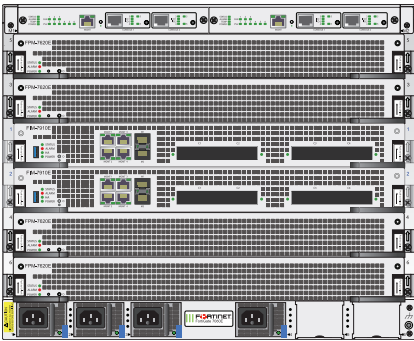


FortiGate 7000 Series deployment in large campus networks (NGFW, ISFW)



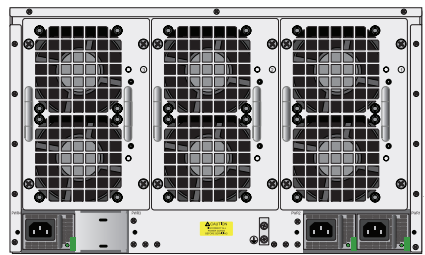
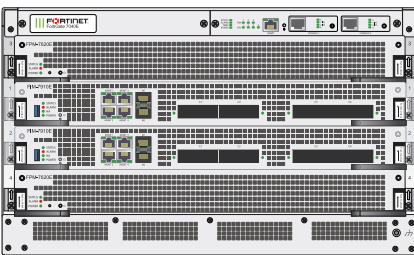
FortiGate 7000 Series deployment in data center (DCFW/NGFW, ISFW)

## SYSTEM



### 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

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

	FORTIGATE 7060E	FORTIGATE 7040E
<b>Hardware Specifications</b>		
Module Slots	6	4
Shelf Manager	2	1
<b>System Performance and Capacity</b>		
Firewall Throughput (1518 / 512 / 64 byte, UDP)	630 / 630 / 340 Gbps	315 / 310 / 200 Gbps
Firewall Latency (64 byte, UDP)	7 $\mu$ s	7 $\mu$ s
Firewall Throughput (Packet per Second)	510 Mpps	300 Mpps
Concurrent Sessions (TCP)	320 Million	160 Million
New Sessions/Sec (TCP)	1.8 Million	950,000
Firewall Policies	200,000	200,000
IPsec VPN Throughput (512 byte)	100 Gbps	100 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	40,000	40,000
Client-to-Gateway IPsec VPN Tunnels	64,000	64,000
SSL-VPN Throughput	N/A	N/A
Concurrent SSL-VPN Users (Recommended Maximum)	N/A	N/A
IPS Throughput (HTTP / Enterprise Mix) <sup>1</sup>	360 / 120 Gbps	140 / 60 Gbps
SSL Inspection Throughput <sup>2</sup>	TBA	50 Gbps
Application Control Throughput <sup>3</sup>	160 Gbps	80 Gbps
NGFW Throughput <sup>4</sup>	100 Gbps	50 Gbps
Threat Protection Throughput <sup>5</sup>	80 Gbps	40 Gbps
CAPWAP Throughput <sup>6</sup>	N/A	N/A
Virtual Domains (Default / Maximum)	10 / 500	10 / 500
Maximum Number of FortiAPs (Total / Tunnel Mode)	N/A	N/A
Maximum Number of FortiTokens	5,000	5,000
Maximum Number of Registered FortiClients	20,000	20,000
High Availability Configurations	Supported	Supported
<b>Dimensions</b>		
Height x Width x Length (inches)	13.4 x 17.3 x 25.6	10.4 x 17.3 x 25.6
Height x Width x Length (mm)	352.7 x 440 x 650	264 x 440 x 650
Weight	205 lbs (93 kg)	90.3 lbs (41 kg)

# SYSTEM

	FORTIGATE 7060E	FORTIGATE 7040E
<b>Power and Environment</b>		
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 by default, optionally an additional PSU can be added for redundancy)
Power Consumption (Maximum / Average) *	3277 / 2330 W	2500 / 1800 W
Heat Dissipation (Maximum) *	11,184 BTU/h	8,530 BTU/h
Operating Temperature	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)
Humidity	20–90% non-condensing	20–90% non-condensing
<b>Compliance</b>		
Certifications	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB

\* Based on all default included components.

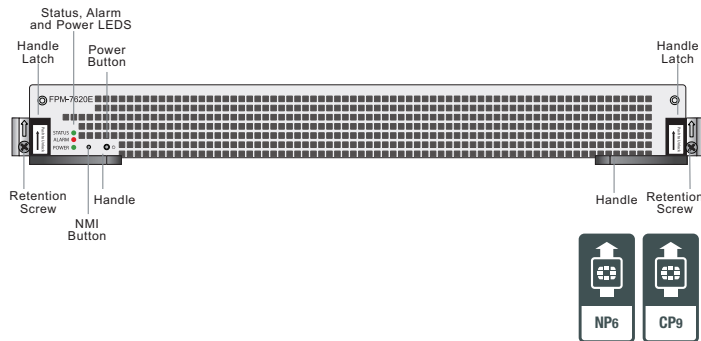
Note: All performance values are "up to" and vary depending on system configuration. IPsec VPN performance is based on 512 byte UDP packets using AES-256+SHA1. 1. IPS performance is measured using 1 Mbyte HTTP and Enterprise Traffic Mix. 2. SSL Inspection is measured with IPS enabled and HTTP traffic, 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

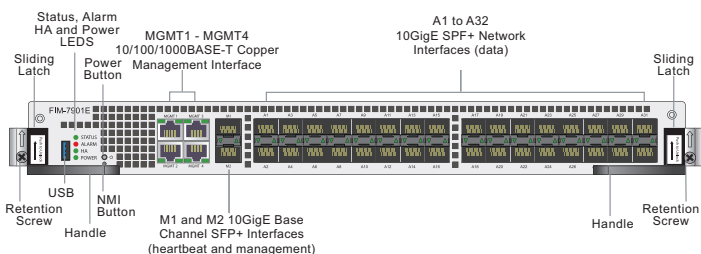
Latest purpose-built SPU CP9 accelerated processor module with superior content processing throughput and protection. Runs on FortiOS 5 – the most powerful security operating system in the world.



	FPM-7620E
<b>Power and Environment</b>	
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
<b>Compliance</b>	
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.

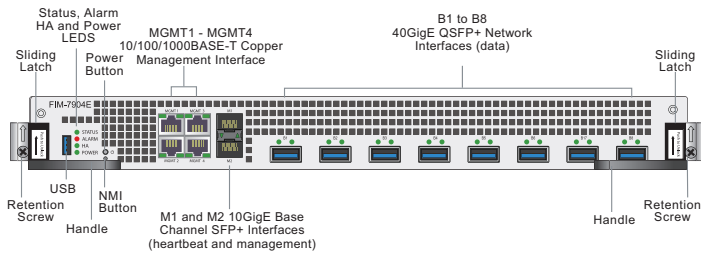


	FIM-7901E
<b>Interfaces</b>	
Network Interfaces	32x GE/10 GE SFP+ /
Base Channel Interfaces	2x 10 GE SFP+
Management Interfaces	4x GE RJ45
Included Transceivers	2x SFP+ SR
<b>Power and Environment</b>	
Power Consumption (Average / Maximum)	260 / 450 W
Heat Dissipation	1531 BTU/h
Operating Temperature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

## MODULES

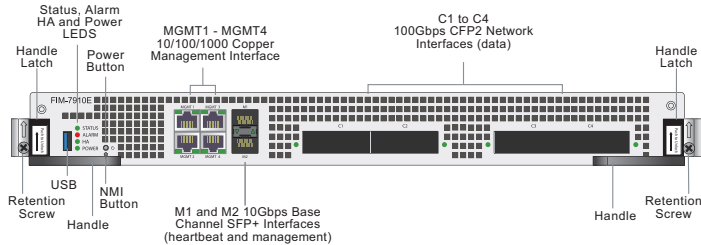
### Fortinet Interface Module 7904E

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



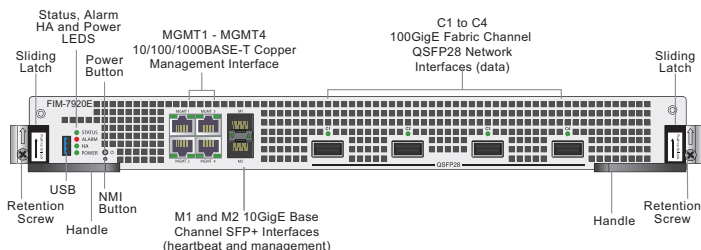
### Fortinet Interface Module 7910E

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

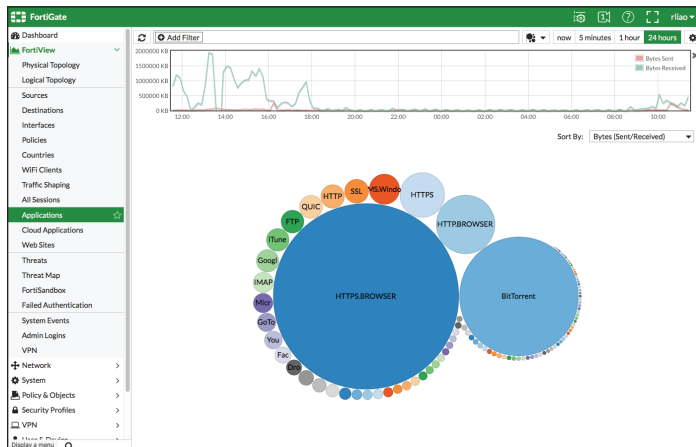
FIM-7910E	
<b>Interfaces</b>	
Network Interfaces	4x 100 GE CFP2
Base Channel Interfaces	2x 10 GE SFP+
Management Interfaces	4x GE RJ45
Included Transceivers	2x SFP+ SR
<b>Power and Environment</b>	
Power Consumption (Average / Maximum)	260 / 450 W
Heat Dissipation	1531 BTU/h
Operating Temperature	32–104°F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

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

## SOFTWARE

### FortiOS

Control all the security and networking capabilities across the entire FortiGate platform with one intuitive operating system. Reduce operating expenses and save time with a truly consolidated next generation security platform.



- A truly consolidated platform with one OS for all security and networking services for all FortiGate platforms.
- Industry-leading protection: NSS Labs Recommended, VB100, AV Comparatives and ICSA validated security and performance.
- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings.
- Detect, contain and block advanced attacks automatically in minutes with integrated advanced threat protection framework.
- Solve your networking needs with extensive routing, switching and WAN capabilities.
- Activate all the SPU-booster capabilities you need on the fastest firewall platform available.



For more information, please refer to the FortiOS data sheet available at [www.fortinet.com](http://www.fortinet.com)

## SERVICES

### FortiGuard™ Security Services

FortiGuard Labs offers 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, other network and security vendors, as well as law enforcement agencies:

- **Real-time Updates** — 24x7x365 Global Operations research security intelligence, distributed via Fortinet Distributed Network to all Fortinet platforms.
- **Security Research** — FortiGuard Labs have discovered over 170 unique zero-day vulnerabilities to date, totaling millions of automated signature updates monthly.
- **Validated Security Intelligence** — Based on FortiGuard intelligence, Fortinet's network security platform is tested and validated by the world's leading third-party testing labs and customers globally.



#### Enterprise 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 the FortiGuard Enterprise Bundle. This bundle contains the full set of FortiGuard security services plus FortiCare service and support offering the most flexibility and broadest range of protection all in one package.

### 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:

- **Enhanced Support** — For customers who need support during local business hours only.
- **Comprehensive Support** — For customers who need around-the-clock mission critical support, including advanced exchange hardware replacement.
- **Advanced Services** — For global or regional customers who need an assigned Technical Account Manager, enhanced service level agreements, extended software support, priority escalation, on-site visits and more.
- **Professional Services** — For customers with more complex security implementations that require architecture and design services, implementation and deployment services, operational services and more.
- **FortiCare 360°** — For customers who want assistance with ongoing monitoring and operational risk reduction, including recurring health checks, personalized monthly audit reports and more.

## BUNDLE MATRIX

SKU	COMPONENTS				
Bundle	Chassis	Processing Module	I/O Module 1	I/O Module 2	Services
FG-7040E-1	FG-7040E*	2x FPM-7620E	FIM-7901E	FIM-7901E	
FG-7040E-2	FG-7040E*	2x FPM-7620E	FIM-7904E	FIM-7904E	
FG-7040E-3	FG-7040E*	2x FPM-7620E	FIM-7910E	FIM-7910E	
FG-7040E-4	FG-7040E*	2x FPM-7620E	FIM-7901E	FIM-7904E	Chassis-based pricing — Individual and bundled FortiGuard security services and support subscription services: UTM Bundle, Enterprise Bundle and FortiCare360°
FG-7040E-5	FG-7040E*	2x FPM-7620E	FIM-7901E	FIM-7910E	
FG-7040E-6	FG-7040E*	2x FPM-7620E	FIM-7904E	FIM-7910E	
FG-7040E-8	FG-7040E*	2x FPM-7620E	Choose One	Choose One	
FG-7060E-1	FG-7060E*	4x FPM-7620E	FIM-7901E	FIM-7901E	Chassis-based pricing — Individual and bundled FortiGuard security services and support subscription services: UTM Bundle, Enterprise Bundle and FortiCare360°
FG-7060E-3	FG-7060E*	4x FPM-7620E	FIM-7910E	FIM-7910E	
FG-7060E-8	FG-7060E*	2x FPM-7620E	Choose One	Choose One	

\* Not sold separately

## ORDER INFORMATION

BUNDLE ITEMS	SKU	DESCRIPTION
FortiGate 7040E-1 Bundle	FG-7040E-1	6U 4-slot chassis with 2x FPM-7620E processor modules, 2x FIM-7901E modules with 64x 10 GE SFP+ slots total, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-2 Bundle	FG-7040E-2	6U 4-slot chassis with 2x FPM-7620E processor modules, 2x FIM-7904E modules with 16x 40 GE QSFP+ slots total, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-3 Bundle	FG-7040E-3	6U 4-slot chassis with 2x FPM-7620E processor modules, 2x FIM-7910E I/O module with 8x 100 GE CFP2 slots total, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-4 Bundle	FG-7040E-4	6U 4-slot chassis with 2x FPM-7620E processor modules, 1x FIM-7901E module with 32x 10 GE SFP+ slots, 1x FIM-7904E module with 8x 40 GE QSFP+ slots, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-5 Bundle	FG-7040E-5	6U 4-slot chassis with 2x FPM-7620E processor modules, 1x FIM-7901E module with 32x 10 GE SFP+ slots, 1x FIM-7910E module with 4x 100 GE CFP2 slots, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-6 Bundle	FG-7040E-6	6U 4-slot chassis with 2x FPM-7620E processor modules, 1x FIM-7904E module with 8x 40 GE QSFP+ slots, 1x FIM-7910E module with 4x 100 GE CFP2 slots, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-8 Bundle	FG-7040E-8	6U 4-slot chassis with 2x FPM-7620E processor modules, 2x FIM-79xxE specified at purchase, 1x manager module and 3x hot swappable redundant PSU.
FortiGate 7060E-1 Bundle	FG-7060E-1	8U 6-slot chassis with 4x FPM-7620E processor modules, 2x FIM-7901E I/O modules with 64x 10 GE SFP+ slots total, 2x manager modules and 6x hot swappable redundant PSU.
FortiGate 7060E-3 Bundle	FG-7060E-3	8U 6-slot chassis with 4x FPM-7620E processor modules, 2x FIM-7910E I/O modules with 8x 100 GE CFP2 slots total, 2x manager modules and 6x hot swappable redundant PSU.
FortiGate 7060E-8 Bundle	FG-7060E-8	8U 6-slot chassis with 2x FPM-7620E processor modules, 2x FIM-79xxE specified at purchase, 2x manager modules and 4x hot swappable redundant PSU.

## ORDER INFORMATION

OPTIONAL / SPARE ITEMS	SKU	DESCRIPTION
<b>Processor Module</b>		
FPM-7620E Module	FPM-7620E	Hot swappable processor module for 7000E series — SPU NP6 and CP9 hardware accelerated.
<b>I/O Module</b>		
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.
<b>Transceivers</b>		
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.
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.



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