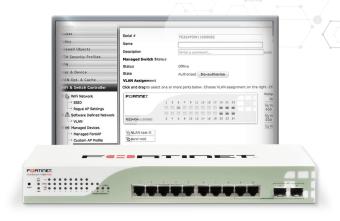


# FortiSwitch™ Secure Access Series

FortiSwitch Secure Access switches deliver a
Secure, Simple, Scalable Ethernet solution
with outstanding security, performance and
manageability for threat conscious small to
mid-sized businesses, distributed enterprises
and branch offices. Tightly integrated into the
FortiGate® Network Security Platform, the FortiSwitch
Secure Access switches can be managed directly from



the familiar FortiGate interface. This single pane of glass management provides complete visibility and control of all users and devices on the network, regardless of how they connect.



#### **Security Fabric Integration**

Reduces complexity and decreases management cost with network security functions managed through a single console via FortiGate.

This integration allows all users to be authenticated against the same user database, regardless of whether they connect to the wired or wireless network, including temporary guest users.

In addition, same security policy can apply to a user or device regardless of how or where they connect to the network.



## **Simplify Network Deployment**

The Power over Ethernet (PoE) capability in some models, enables simple installation of wireless Access Points and IP phones in the network.

#### **Product Offerings**

FS-108E, 108E-POE, 108E-FPOE, 124E, 124E-POE, 124E-FPOE, 224D-FPOE, 248D, 224E, 224E-POE, 248E-POE, 248E-FPOE, 424D, 424D-POE, 424D-FPOE, 448D, 448D-POE, 448D-FPOE, 524D, 524D-FPOE, 548D and 548D-FPOE

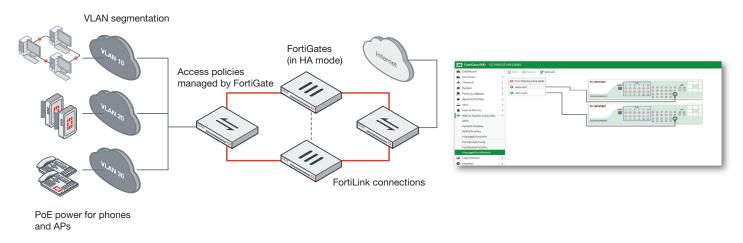


- Secure Access switches suitable for wire closet and desktop installations
- Devices are identified and users authenticated prior to being granted access to the network
- Centralized security management and reporting from FortiGate interface
- Up to 48 ports in a compact 1 RU form factor
- Stackable up to 256 switches per FortiGate depending on model
- Power over Ethernet capable, including PoE+
- Ideal for converged network environments; enabling voice, data and wireless traffic to be delivered across a single network

#### DEPLOYMENT

#### FortiLink Mode

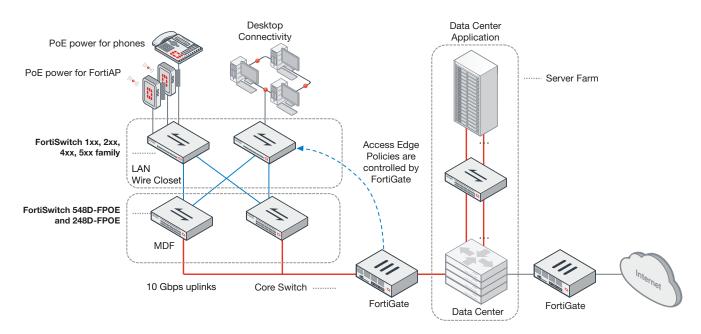
The FortiSwitch Secure Access Switch series integrates directly into the FortiGate\* Connected UTM, with switch administration and access port security managed from the familiar FortiGate interface. Regardless of how users and devices connect to the network, you have complete visibility and control over your network security and access through this single pane of glass, perfectly suited to threatconscious organizations of any size.



<sup>\*</sup> Selected models only

#### Standalone Mode

Virtualization and cloud computing have created dense high-bandwidth Ethernet networking requirements in the data center, pushing the limits of existing data center switching. FortiSwitch Data Center switches meet these challenges by providing a high performance 10 or 40 GE capable switching platform, with a low Total Cost of Ownership. Ideal for Top of Rack server or firewall aggregation applications, as well as enterprise network core or distribution deployments, these switches are purpose-built to meet the needs of today's bandwidth intensive environments.



### **FEATURES**

	FORTISWITCH FORTILINK MODE (WITH FORTIGATE)	
Management and Configuration		
Auto Discovery of Multiple Switches	Yes	
Number of Managed Switches per FortiGate	8 to 256 Depending on FortiGate Model (Please refer to admin guide)	
FortiLink Stacking (Auto Inter-Switch Links)	Yes	
Software Upgrade of Switches	Yes	
Centralized VLAN Configuration	Yes	
Switch POE Control	Yes	
Link Aggregation Configuration	Yes	
Spanning Tree	Yes	
LLDP/MED	Yes	
IGMP Snooping	Yes (not supported on 1xxE-Series)	
L3 Routing and Services	Yes (FortiGate)	
Policy-Based Routing	Yes (FortiGate)	
Virtual Domain	Yes (FortiGate)	
Security and Visibility		
802.1x Authentication (Port-based, MAC-based, MAB)	Yes	
Syslog Collection	Yes	
DHCP Snooping	Yes	
Device Detection	Yes	
MAC Black/While Listing	Yes (FortiGate)	
Policy Control of Users and Devices	Yes (FortiGate)	
UTM Features		
Firewall	Yes (FortiGate)	
IPC, AV, Application Control, Botnet	Yes (FortiGate)	
High Availability		
Support FortiLink FortiGate in HA Cluster	Yes	
LAG support for FortiLink Connection	Yes	
Active-Active Split LAG from FortiGate to FortiSwitches for Advanced Redundancy	Yes (with FS-2xx, 4xx, 5xx)	

	FORTISWITCH STANDALONE MODE	FORTISWITCH 2XXE SERIES	FORTISWITCH 1XXE SERIES
Layer 2			
Jumbo Frames	Yes	Yes	Yes
Auto-negotiation for Port Speed and Duplex	Yes	Yes	Yes
EEE 802.1D MAC Bridging/STP	Yes	Yes	Yes
EEE 802.1w Rapid Spanning Tree Protocol (RSTP)	Yes	Yes	Yes
EEE 802.1s Multiple Spanning Tree Protocol (MSTP)	Yes	Yes	Yes
TP Root Guard	Yes	Yes	Yes
TP BPDU Guard	Yes	Yes	Yes
edge Port / Port Fast	Yes	Yes	Yes
EEE 802.1Q VLAN Tagging	Yes	Yes	Yes
rivate VLAN	Yes	Yes	No
EEE 802.3ad Link Aggregation with LACP	Yes	Yes	Yes
nicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac)	Yes	Yes	Yes
EEE 802.1AX Link Aggregation	Yes	Yes	Yes
panning Tree Instances (MSTP/CST)	15/1	15/1	15/1
EEE 802.3x Flow Control and Back-pressure	Yes	Yes	Yes
EEE 802.3 10Base-T	Yes	Yes	Yes
EEE 802.3u 100Base-TX	Yes	Yes	Yes
EEE 802.3z 1000Base-SX/LX	Yes	Yes	Yes
EEE 802.3ab 1000Base-T	Yes	Yes	Yes
EEE 802.3ae 10 Gigabit Ethernet	4xx and 5xx Family	N/A	N/A
EEE 802.3 CSMA/CD Access Method and Physical Layer Specifications	Yes	Yes	Yes
Storm Control	Yes	Yes	Yes
/AC, IP, Ethertype-based VLANs	Yes	Yes	No
/irtual-Wire	Yes	Yes	No
Split Port (QSFP+ breakout to 4xSFP+)	FS-5xx Family	N/A	N/A
Fime-Domain Reflectcometry (TDR) Support	Yes	Yes	No

### **FEATURES**

	FORTISWITCH	FORTISWITCH	FORTISWITCH
	STANDALONE MODE	2XXE SERIES	1XXE SERIES
ayer 3*			
Static Routing (Hardware-based)	Yes	Yes	N/A
Routing Entries	64 on FS-2xx, 4xx Family; 16K on FS-5xx Family	64	N/A
Host Entries	4K on FS-2xx, 4xx Family; 24K on FS-5xx Family	4K	N/A
Dynamic Routing Protocols**	OSPFv2, RIPv2, VRRP	OSPFv2, RIPv2, VRRP	N/A
ECMP	FS-5xx Family	No	N/A
Bidirectional Forwarding Detection (BFD)	Yes	Yes	N/A
DHCP Relay	Yes	Yes	N/A
Services	100	103	14/1
	Von	Von	No
GMP Snooping	Yes	Yes	No
Security and Visibility	V.		
ort Mirroring	Yes	Yes	Yes
dmin Authentication Via RFC 2865 RADIUS	Yes	Yes	Yes
EEE 802.1x authentication Port-based	Yes	Yes	Yes
EEE 802.1x Authentication MAC-based	Yes	Yes	Yes
EEE 802.1x Guest and Fallback VLAN	Yes	Yes	Yes
EEE 802.1x MAC Access Bypass (MAB)	Yes	Yes	Yes
EEE 802.1x Dynamic VLAN Assignment	Yes	Yes	Yes
Radius CoA (Change of Authority)	Yes	Yes	No
Radius Accounting	Yes	Yes	No
MAC-IP Binding	5xx only	No	No
Flow	Yes	Yes	No
NOW NCL		512 Entries	No
AOL	1K entries on FS-5xx Family; 512 on FS-1xx, 2xx, 4xx Families;	312 EIIIIES	INU
EEE 802.1ab Link Layer Discovery Protocol (LLDP)	Yes	Yes	Yes
EEE 802.1ab LLDP-MED	Yes	Yes	Yes
DHCP-Snooping	Yes		No
Dynamic ARP Inspection	Yes	Yes Yes	No
Sticky MAC and MAC Limit	Yes (2xx, 4xx and 5xx)	Yes	MAC Limit Only
•	165 (ZM, 4M dilu JM)	105	IVIAG LITTIL OTIIY
ligh Availability	V 4		
Multi-Chassis Link Aggregation (MCLAG)	Yes (2xx, 4xx and 5xx)	Yes	N/A
Quality of Service			
EEE 802.1p Based Priority Queuing	Yes (2xx, 4xx and 5xx)	Yes	No
P TOS/DSCP Based Priority Queuing	Yes (2xx, 4xx and 5xx)	Yes	No
<b>N</b> anagement			
Pv4 and IPv6 Management	Yes	Yes	Yes
elnet / SSH	Yes	Yes	Yes
HTTP / HTTPS	Yes	Yes	Yes
NMP v1/v2c/v3			
	Yes Vac	Yes	Yes
NTP	Yes	Yes	Yes
Standard CLI and Web GUI Interface	Yes	Yes	Yes
Software download/upload: TFTP/FTP/GUI	Yes	Yes	Yes
Nanaged from FortiGate	Yes	Yes	Yes
Support for HTTP REST APIs for Configuration and Monitoring	Yes	Yes	Yes
dditional RFC and MIB Support			
FC 2571 Architecture for Describing SNMP	Yes	Yes	Yes
HCP Client	Yes	Yes	Yes
FC 854 Telnet Server	Yes	Yes	Yes
FC 2865 RADIUS	Yes	Yes	Yes
FC 1643 Ethernet-like Interface MIB	Yes	Yes	Yes
IFC 1213 MIB-II	Yes	Yes	Yes
IFC 1354 IP Forwarding Table MIB	Yes	Yes	Yes
	Voo	Yes	Yes
	Yes		
RFC 2572 SNMP Message Processing and Dispatching RFC 1573 SNMP MIB II	Yes	Yes	Yes
			Yes Yes

<sup>\*</sup> Supported on 2xx, 4xx and 5xx. \*\* Requires 'Advanced Features' License.

	FORTISWITCH 108E	FORTISWITCH 108E-POE	FORTISWITCH 108E-FP0E
Hardware Specifications			
Total Network Interfaces	7x GE RJ45, 1x GE/POE-PD RJ45 and 2x GE SFP	8x GE RJ45 and 2x GE SFP	8x GE RJ45 and 2x GE SFP
Dedicated Management 10/100 Port	0	0	0
RJ-45 Serial Console Port	1	1	1
Form Factor	Desktop	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	0	4 (802.3af/at)	8 (802.3af/at)
PoE Power Budget	0	65 W	130 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	20 Gbps	20 Gbps	20 Gbps
Packets Per Second	14.88 Mpps	14.88 Mpps	14.88 Мррѕ
MAC Address Storage	8 K	8 K	8 K
Network Latency	4µs	4µs	4µs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	8	8	8
Packet Buffers	512 KB	512 KB	512 KB
DRAM	256 MB DDR3	256 MB DDR3	256 MB DDR3
FLASH	32 MB	32 MB	32 MB
Dimensions			
Height x Depth x Width (inches)	1.5 x 6.3 x 8.7	1.7 x 8.2 x 13	1.7 x 8.2 x 13
Height x Depth x Width (mm)	38 x 160 x 220	44 x 209 x 330	44 x 209 x 330
Weight	2.2 lbs (1 kg) 4.3 lbs (1.95 kg) 4.5 lbs (2.04 kg)		4.5 lbs (2.04 kg)
Environment			
Power Required	100-240V AC, 50-60 Hz / PoE-PSE(af)	100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz
Power Supply	AC & PoE-PD Built in	AC Built in	AC Built in
Redundant Power	—	_	_
Power Consumption (Average / Maximum)	5.54 W / 6.26 W	5.19 W / 6.10 W	5.19 W / 6.10 W
Heat Dissipation	18.9 BTU/h	17.7 BTU/h	17.7 BTU/h
Operating Temperature	32-104°F (0-40°C)	32-104°F (0-40°C)	32-104°F (0-40°C)
Storage Temperature	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)
Humidity	10-90% non-condensing	10-90% non-condensing	10-90% non-condensing
Certification and Compliance	FC	CC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	
Warranty		, oz, nom, roon, bomi, oz, ob, nonoz	
Fortinet Warranty	Limited lifetime* warranty on all models		

 $<sup>^\</sup>star$  Fortinet Warranty Policy: http://www.fortinet.com/doc/legal/EULA.pdf



FortiSwitch 108E





FortiSwitch 108E-FPOE

	FORTISWITCH 124E	FORTISWITCH 124E-P0E	FORTISWITCH 124E-FP0E
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 and 4x GE SFP	24x GE RJ45 and 4x GE SFP	24x GE RJ45 and 4x GE SFP
Dedicated Management 10/100 Port	0	0	0
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	0	12 (802.3af/at)	24 (802.3af/at)
PoE Power Budget	0	185 W	370 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	56 Gbps	56 Gbps	56 Gbps
Packets Per Second	41.66 Mpps	41.66 Mpps	41.66 Mpps
MAC Address Storage	8 K	8 K	8 K
Network Latency	4µs	4µs	4µs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	8	8	8
Packet Buffers	512 KB	512 KB	512 KB
DRAM	256 MB DDR3	256 MB DDR3	256 MB DDR3
FLASH	32 MB	32 MB	32 MB
Dimensions			
Height x Depth x Width (inches)	1.7 x 8.2 x 13	1.7 x 12.2 x 17.3	1.7 x 12.2 x 17.3
Height x Depth x Width (mm)	44 x 209 x 330	44 x 309 x 440	44 x 309 x 440
Weight	4.7 lbs (2.13 kg)	11.1 lbs (5.03 kg)	11.2 lbs (5.03 kg)
Environment			
Power Required	100-240V AC, 50-60 Hz	100–240V AC, 50–60 Hz	100-240V AC, 50-60 Hz
Power Supply	AC Built in	AC Built in	AC Built in
Redundant Power	—	_	—
Power Consumption (Average / Maximum)	15.83 W /17.79 W	17.78 W / 20.45 W	17.78 W / 20.45 W
Heat Dissipation	54 BTU/h	60.67 BTU/h	60.67 BTU/h
Operating Temperature	32-104°F (0-40°C)	32-104°F (0-40°C)	32-104°F (0-40°C)
Storage Temperature	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)
Humidity	10-90% non-condensing	10-90% non-condensing	10-90% non-condensing
Certification and Compliance			
	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2		
Warranty			
Fortinet Warranty	Limited lifetime* warranty on all models		

 $<sup>{}^{\</sup>star}\operatorname{\textit{Fortinet Warranty Policy:}} \textbf{http://www.fortinet.com/doc/legal/EULA.pdf}$ 



FortiSwitch 124E





FortiSwitch 124E-POE

FortiSwitch 124E-FPOE

	FORTISWITCH 224D-FP0E	FORTISWITCH 224E	FORTISWITCH 224E-P0E
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 ports and 4x GE SFP ports	24x GE RJ45 ports and 4x GE SFP ports	24x GE RJ45 ports and 4x GE SFP ports
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	24 (802.3af/802.3at)	NA	12 (802.3af/802.3at)
PoE Power Budget	370 W	NA	180 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	56 Gbps	56 Gbps	56 Gbps
Packets Per Second	41.66 Mpps	41.66 Mpps	41.66 Mpps
MAC Address Storage	16 K	16 K	16 K
Network Latency	< 1µs	< 1µs	< 1µs
/LANs Supported	4 K	4 K	4 K
ink Aggregation Group Size	8	8	8
Total Link Aggregation Groups	14	14	14
Packet Buffers	1.5 MB	1.5 MB	1.5 MB
DRAM	512 MB	512 MB	512 MB
FLASH	128 MB	128 MB	128 MB
Dimensions			
Height x Depth x Width (inches)	1.73 x 12.2 x 17.5	1.73 x 9 x 12.99	1.73 x 9 x 12.99
Height x Depth x Width (mm)	44 x 310 x 440	44 x 230 x 330	44 x 230 x 330
Veight	10.64 lbs (4.83 kg)	4.78 lbs (2.17 kg)	5.37 lbs (2.44 kg)
invironment			
Power Required	100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	Optional FRPS-740	Redundant AC	Optional FRPS-740
Power Consumption (Average / Maximum)	380 W / 397 W	17.2 W / 17.3 W	220.18 W / 223.57 W
Heat Dissipation	85 BTU/h	59.095 BTU/h	74.29554 BTU/h
Operating Temperature	32-122°F (0-50°C)	32-122°F (0-50°C)	32-122°F (0-50°C)
Storage Temperature	-4–158°F (-20–70°C)	-4-158°F (-20-70°C)	-4-158°F (-20-70°C)
lumidity	10–90% non-condensing	10-90% non-condensing	10-90% non-condensing
Certification and Compliance			
		FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	
Warranty			

Fortinet Warranty

\* Fortinet Warranty Policy: http://www.fortinet.com/doc/legal/EULA.pdf



FortiSwitch 224D-FPOE



FortiSwitch 224E

Limited lifetime\* warranty on all models



FortiSwitch 224E-POE

	FORTISWITCH 248D	FORTISWITCH 248E-P0E	FORTISWITCH 248E-FP0E
Hardware Specifications			
Total Network Interfaces	48x GE RJ45 ports and	48x GE RJ45 ports and	48x GE RJ45 ports and
	4x GE SFP ports	4x GE SFP ports	4x GE SFP ports
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	_	24 (802.3af/802.3at)	48 (802.3af/802.3at)
PoE Power Budget	N/A	370 W	740 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	104 Gbps	104 Gbps	104 Gbps
Packets Per Second	77.4 Mpps	77.4 Mpps	77.4 Mpps
MAC Address Storage	16 K	16 K	16 K
Network Latency	< 1µs	< 1µs	< 1µs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	26	26	26
Packet Buffers	1.5 MB	1.5 MB	1.5 MB
DRAM	512 MB	512 MB	512 MB
FLASH	128 MB	128 MB	128 MB
Dimensions			
Height x Depth x Width (inches)	1.73 x 9.68 x 17.3	1.73 x 16.1 x 17.3	1.73 x 16.1 x 17.3
Height x Depth x Width (mm)	44 x 246 x 440	44 x 410 x 440	44 x 410 x 440
Weight	7.81 lbs (3.54 kg)	12.12 lbs (5.5 kg)	13.44 lbs (6.1 kg)
Environment			
Power Required	100-240V AC, 50-60 Hz	100–240V AC, 50–60 Hz	100-240V AC, 50-60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	_	Optional FRPS-740	Optional FRPS-740
Power Consumption (Average / Maximum)	38.66 W / 39.19 W	457.46 W / 466.47 W	842 W / 855.02 W
Heat Dissipation	134 BTU/h	177.14268 BTU/h	162.87865 BTU/h
Operating Temperature	32-122°F (0-50°C)	32-122°F (0-50°C)	32-122°F (0-50°C)
Storage Temperature	-4–158°F (-20–70°C)	-4–158°F (-20–70°C)	-4–158°F (-20–70°C)
Humidity	10–90% non-condensing	10-90% non-condensing	10–90% non-condensing
Certification and Compliance			
		FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	
Warranty			
Fortinet Warranty		Limited lifetime* warranty on all models	



FortiSwitch 248D



FortiSwitch 248E-POE



FortiSwitch 248E-FPOE

<sup>\*</sup> Fortinet Warranty Policy: http://www.fortinet.com/doc/legal/EULA.pdf

	FORTISWITCH 424D	FORTISWITCH 424D-P0E	FORTISWITCH 424D-FP0E
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 and 2x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	24x GE RJ45 and 2x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	24x GE RJ45 and 2x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	_	12 (802.3af/at)	24 (802.3af/at)
PoE Power Budget	N/A	185 W	370 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	88 Gbps	88 Gbps	88 Gbps
Packets Per Second	65.5 Mpps	65.5 Mpps	65.5 Mpps
MAC Address Storage	16 K	16 K	16 K
Network Latency	< 1µs	< 1µs	< 1µs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	13	13	13
Packet Buffers	1.5 MB	1.5 MB	1.5 MB
DRAM	1 GB	1 GB	1 GB
FLASH	128 MB	128 MB	128 MB
Dimensions			
Height x Depth x Width (inches)	1.75 x 10.12 x 17.3	1.75 x 10.12 x 17.3	1.73 x 12.2 x 17.5
Height x Depth x Width (mm)	44 x 250 x 440	44 x 250 x 440	44 x 310 x 440
Weight	7.14 lbs (3.24 kg) 8.42 lbs (3.82 kg)		10.64 lbs (4.83 kg)
Environment			
Power Required	100–240V AC, 50–60 Hz	100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	Dual power supplies	Optional FRPS-740	Optional FRPS-740
Power Consumption (Average / Maximum)	17.3 W / 17.2 W	208 W / 210 W	397 W / 403 W
Heat Dissipation	69 BTU/h	89 BTU/h	100 BTU/h
Operating Temperature	32-122°F (0-50°C)	32-122°F (0-50°C)	32-122°F (0-50°C)
Storage Temperature	-4–158°F (-20–70°C)	-4–158°F (-20–70°C)	-4–158°F (-20–70°C)
Humidity	10–90% non-condensing	10–90% non-condensing	10-90% non-condensing
Certification and Compliance			
	FCC, CE, RCM,	VCCI, BSMI, UL, CB, RoHS2	
Warranty			
Fortinet Warranty	anty Limited lifetime* warranty on all models		

<sup>\*</sup> Fortinet Warranty Policy: http://www.fortinet.com/doc/legal/EULA.pdf



FortiSwitch 424D



FortiSwitch 424D-POE



FortiSwitch 424D-FPOE



	CH 448D-POE FORTISWITCH 448D-FPOE
Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         Note: SFP+ ports are compatible with 1 GE SFP         1           Row Factor         1 RU Rack Mount         2 RU Rack Mount         1 RU Rack Mount	
RJ-45 Serial Console Port         1         1           Form Factor         1 RU Rack Mount         1 RU Rack Mount           Power over Ethernet (PoE) Ports         —         24 (802.3af/           PoE Power Budget         N/A         370 W           Mean Time Between Failures         > 10 years         > 10 years           System Specifications         **         **           Switching Capacity         176 Gbps         176 Gbps           Packets Per Second         131 Mpps         131 Mpps           MAC Address Storage         16 K         16 K           Network Latency         < 1μs	5 and 4x10 GE SFP+ ports oorts are compatible with 1 GE SFP Note: SFP+ ports are compatible with 1 GE SFP
Form Factor         1 RU Rack Mount         1 RU Rack Mount           Power over Ethernet (PoE) Ports         —         24 (802.3at/           PoE Power Budget         N/A         370 W           Mean Time Between Failures         > 10 years         > 10 years           System Specifications         Switching Capacity         176 Gbps         176 Gbps           Packets Per Second         131 Mpps         131 Mpps         131 Mpps           MAC Address Storage         16 K         16 K         16 K           Network Latency         < 1μs	1
Power over Ethernet (PoE) Ports         —         24 (802.3af/           PoE Power Budget         N/A         370 W           Mean Time Between Failures         > 10 years         > 10 years           System Specifications           Switching Capacity         176 Gbps         176 Gbps           Packets Per Second         131 Mpps         131 Mpps           MAC Address Storage         16 K         16 K           Network Latency         < 1μs         < 1μs           VLANS Supported         4 K         4 K           Link Aggregation Group Size         8         8           Total Link Aggregation Groups         26         26           Packet Buffers         1.5 MB         1.5 MB	1
PoE Power Budget         N/A         370 W           Mean Time Between Failures         > 10 years         > 10 years           System Specifications           Switching Capacity         176 Gbps         176 Gbps           Packets Per Second         131 Mpps         131 Mpps           MAC Address Storage         16 K         16 K           Network Latency         < 1μs	lount 1 RU Rack Mount
Mean Time Between Failures         > 10 years         > 10 years           System Specifications         Switching Capacity         176 Gbps         176 Gbps           Packets Per Second         131 Mpps         131 Mpps           MAC Address Storage         16 K         16 K           Network Latency         < 1μs         < 1μs           VLANS Supported         4 K         4 K           Link Aggregation Group Size         8         8           Total Link Aggregation Groups         26         26           Packet Buffers         1.5 MB         1.5 MB	at) 48 (802.3af/at)
System Specifications           Switching Capacity         176 Gbps         176 Gbps           Packets Per Second         131 Mpps         131 Mpps           MAC Address Storage         16 K         16 K           Network Latency         < 1µs	740 W
Switching Capacity         176 Gbps         176 Gbps           Packets Per Second         131 Mpps         131 Mpps           MAC Address Storage         16 K         16 K           Network Latency         < 1μs	> 10 years
Packets Per Second         131 Mpps         131 Mpps           MAC Address Storage         16 K         16 K           Network Latency         < 1μs	
MAC Address Storage         16 K         16 K           Network Latency         < 1μs	176 Gbps
Network Latency         < 1 µs         < 1 µs           VLANS Supported         4 K         4 K           Link Aggregation Group Size         8         8           Total Link Aggregation Groups         26         26           Packet Buffers         1.5 MB         1.5 MB	131 Mpps
VLANs Supported         4 K         4 K           Link Aggregation Group Size         8         8           Total Link Aggregation Groups         26         26           Packet Buffers         1.5 MB         1.5 MB	16 K
Link Aggregation Group Size         8         8           Total Link Aggregation Groups         26         26           Packet Buffers         1.5 MB         1.5 MB	< 1µs
Link Aggregation Group Size         8         8           Total Link Aggregation Groups         26         26           Packet Buffers         1.5 MB         1.5 MB	4 K
Total Link Aggregation Groups         26         26           Packet Buffers         1.5 MB         1.5 MB	8
	26
DRAM 1 GB 1 GB	1.5 MB
	1 GB
<b>FLASH</b> 128 MB 128 MB	128 MB
Dimensions	
Height x Depth x Width (inches)         1.75 x 12.2 x 17.3         1.73 x 16.1	x 17.3 1.73 x 16.1 x 17.3
Height x Depth x Width (mm)         44 x 310 x 440         44 x 410 x 4	44 x 410 x 440
Weight 9.15 lbs (4.15 kg) 13.44 lbs (6	i.1 kg) 15.45 lbs (7.01 kg)
Environment	
<b>Power Required</b> 100–240V AC, 50–60 Hz 100–240V A	C, 50–60 Hz 100–240V AC, 50–60 Hz
Power Supply AC built in AC built in AC built in	AC built in
Redundant Power Dual power supplies Optional FRPS	S-740 Dual power supplies
Power Consumption (Average / Maximum)         38 W / 38 W         417 W / 419	) W 790 W / 792 W
Heat Dissipation147 BTU/h177 BTU/h	193 BTU/h
Operating Temperature         32–122°F (0–50°C)         32–122°F (	0–50°C) 32–122°F (0–50°C)
Storage Temperature         -4-158°F (-20-70°C)         -4-158°F (-	
<b>Humidity</b> 10–90% non-condensing 10–90% nor	
Certification and Compliance	
FCC, CE, RCM, VCCI, BSMI	, UL, CB, RoHS2
Warranty	
Fortinet Warranty Limited lifetime* warranty or	

<sup>\*</sup> Fortinet Warranty Policy: http://www.fortinet.com/doc/legal/EULA.pdf



FortiSwitch 448D



FortiSwitch 448D-POE



FortiSwitch 448D-FPOE

	FORTISWITCH 524D	FORTISWITCH 524D-FP0E	FORTISWITCH 548D	FORTISWITCH 548D-FP0E
Hardware Specifications				
Total Network Interfaces	24 GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP	24 GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP	48x GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP	48x GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatibl with 1G SFP
Dedicated Management 10/100/1000 Ports	1	1	1	1
RJ-45 Serial Console Port	1	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	N/A	24 (802.3af/at)	N/A	48 (802.3af/at)
PoE Power Budget	N/A	400 W	N/A	750 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years	> 10 years
System Specifications				
Switching Capacity	288 Gbps	288 Gbps	336 Gbps	336 Gbps
Packets Per Second	214.3 Mpps	214.3 Mpps	250 Mpps	250 Mpps
MAC Address Storage	96 K	96 K	96 K	96 K
Network Latency	< 2µs	< 2µs	< 2µs	< 2µs
VLANs Supported	4 K	4 K	4 K	4 K
Link Aggregation Group Size	24	24	48	48
Total Link Aggregation Groups	15	15	26	26
Packet Buffers	4 MB	4 MB	4 MB	4 MB
DRAM	2 GB	2 GB	2 GB	2 GB
FLASH	128 MB	128 MB	128 MB	128 MB
Dimensions				
Height x Depth x Width (inches)	1.75 x 13.8 x 17.3	1.75 x 13.8 x 17.3	1.75 x 13.8 x 17.3	1.75 x 13.8 x 17.3
Height x Depth x Width (mm)	44 x 350 x 439	44 x 350 x 439	44 x 350 x 439	44 x 350 x 439
	13.6 lbs (6.2 kg)	15.74 lbs (7.14 kg)	14.1 lbs (6.4 kg)	15.74 lbs (7.14 kg)
Environment				
Power Required	100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz
Power Supply	150 W AC PSU	600 W AC PSU	150 W AC PSU	920 W AC PSU
Redundant Power	Optional FS-PSU-150 (for 150 W backup only)	Optional FS-PSU-600 (for 600 W for additional PoE)	Optional FS-PSU-150 (for 150 W backup only)	Optional FS-PSU-900 (for 900 W for additional PoE)
Power Consumption (Average / Maximum)	73 W / 75 W	570 W / 579 W (full PoE load)	74 W / 77 W	925 W / 961 W (full PoE load)
Heat Dissipation	247 BTU/h	296 BTU/h (full PoE loading)	252 BTU/h	318 BTU/h (full PoE loading)
Operating Temperature	32–113°F (0–45°C)	32-113°F (0-45°C)	32-113°F (0-45°C)	32–113°F (0–45°C)
Storage Temperature	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)
Humidity	5–95% non-condensing	5–95% non-condensing	5–95% non-condensing	5–95% non-condensing
Certification and Compliance				
201 and domphidio		FCC, CE, RCM, VCCI, BSN	MI, UL, CB, RoHS2	
Warranty				
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Fortinet Warranty

\* Fortinet Warranty Policy: http://www.fortinet.com/doc/legal/EULA.pdf



FortiSwitch 524D



FortiSwitch 548D



FortiSwitch 524D-FPOE

Limited lifetime\* warranty on all models



FortiSwitch 548D-FPOE



#### ORDER INFORMATION

Product	SKU	Description
FortiSwitch 108E	FS-108E	Layer 2 FortiGate switch controller compatible switch with 8 GE RJ45 + 2 SFP ports, line AC and PSE dual powered. Fanless.
FortiSwitch 108E-P0E	FS-108E-P0E	Layer 2 FortiGate switch controller compatible PoE+ switch with 8 GE RJ45 + 2 SFP ports, 4 port PoE with maximum 65 W PoE limit. Fanless.
FortiSwitch 108E-FP0E	FS-108E-FP0E	Layer 2 FortiGate switch controller compatible PoE+ switch with 8 GE RJ45 + 2 SFP ports, 8 port PoE with maximum 130 W PoE limit. Fanless.
FortiSwitch 124E	FS-124E	Layer 2 FortiGate switch controller compatible switch with 24 GE RJ45 + 4 SFP ports. Fanless.
FortiSwitch 124E-P0E	FS-124E-P0E	Layer 2 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 12 port PoE with maximum 185 W limit.
FortiSwitch 124E-F-P0E	FS-124E-FP0E	Layer 2 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 224D-FP0E	FS-224D-FP0E	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 248D	FS-248D	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45 + 4 SFP ports.
FortiSwitch 224E	FS-224E	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45 + 4 SFP ports.
FortiSwitch 224E-P0E	FS-224E-P0E	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 12 port PoE with maximum 180 W limit.
FortiSwitch 248E-P0E	FS-248E-P0E	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 248E-FP0E	FS-248E-FP0E	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4 SFP ports, 48 port PoE with maximum 740 W limit.
FortiSwitch 424D	FS-424D	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45 + 2x 10 GE SFP+ ports.
FortiSwitch 424D-P0E	FS-424D-POE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 2x 10 GE SFP+ ports, 12 port PoE with maximum 185 W limit.
FortiSwitch 424D-FP0E	FS-424D-FP0E	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 2x 10 GE SFP+ ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 448D	FS-448D	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45 + 4x 10 GE SFP+ ports.
FortiSwitch 448D-P0E	FS-448D-POE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4x 10 GE SFP+ ports, 24 port PoE with maximim 370 W limit.
FortiSwitch 448D-FP0E	FS-448D-FP0E	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4x 10 GE SFP+ ports, 48 port PoE with maximum 740 W limit.
FortiSwitch 524D	FS-524D	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45, 4x 10 GE SFP+ and 2x 40 GE QSFP+ ports.
FortiSwitch 524D-FP0E	FS-524D-FP0E	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45, 4x 10 GE SFP+, 2x 40 GE QSFP+ ports, 24 port PoE with maximum 400 W limit.
FortiSwitch 548D	FS-548D	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45, 4x 10 GE SFP+ and 2x 40 GE QSFP+ ports.
FortiSwitch 548D-FP0E	FS-548D-FP0E	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45, 4x 10 GE SFP+ and 2x 40 GE QSFP+ ports, 48 port PoE with maximum 750 W limit.
Accessories		
FortiSwitch Advanced	FS-SW-LIC-200	SW License for FS-200 Series Switches to activate Advanced Features.
Features License	FS-SW-LIC-400	SW License for FS-400 Series Switches to activate Advanced Features.
	FS-SW-LIC-500	SW License for FS-500 Series Switches to activate Advanced Features.
External Redundant AC Power Supply	FRPS-740	Redundant AC power supply for up to 2 units: FS-224D-FP0E, FS-248D-FP0E, FS-424D-FP0E, FS-448D-P0E and FS-424D-P0E.
Redundant AC Power Supply	FS-PSU-150	AC power supply for FS-548D and FS-524D.
	FS-PSU-600	AC power supply for FS-524D-FPOE.*
	FS-PSU-900	AC power supply for FS-548D-PP0E.*

<sup>\*</sup> Provides additional PoE capacity.

For a list of available Transceiver modules, see the Fortinet Transceivers datasheet.



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