# 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.
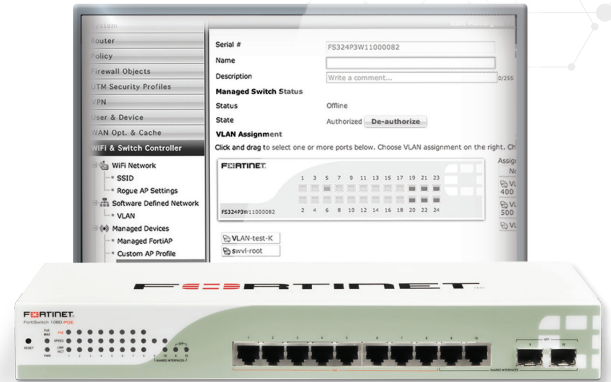
Security Fabric Integration

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.
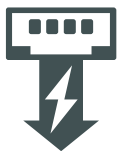
Simplify Network Deployment

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

Highlights

- 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.
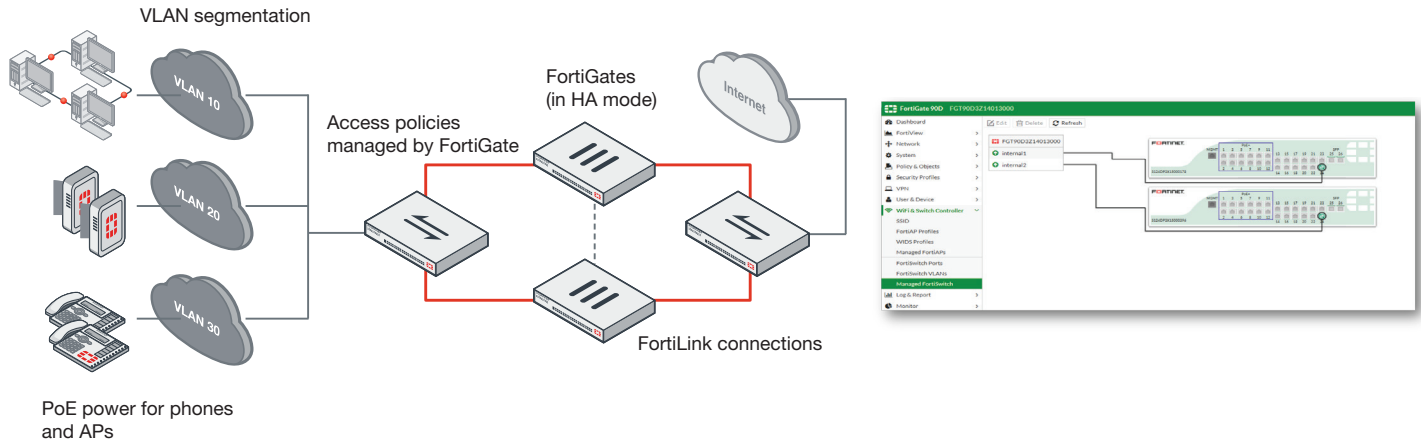
* Selected models only

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.
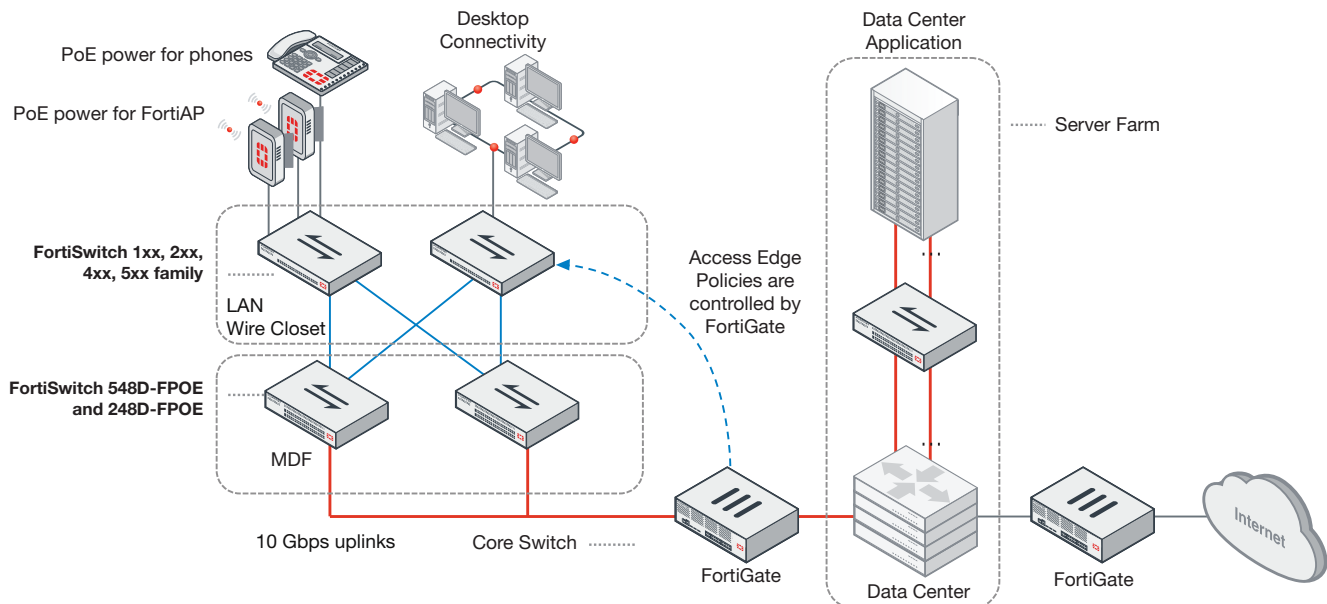
FEATURES

	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
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
Layer 2	
Jumbo Frames	Yes
Auto-negotiation for port speed and duplex	Yes
IEEE 802.1D MAC Bridging/STP	Yes
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)	Yes
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)	Yes
STP Root Guard	Yes
Edge Port / Port Fast	Yes
IEEE 802.1Q VLAN Tagging	Yes
Private VLAN	Yes (except FS-108D-POE, FS-224D-POE)
IEEE 802.3ad Link Aggregation with LACP	Yes
Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac)	Yes
IEEE 802.1AX Link Aggregation	Yes
Spanning Tree Instances (MSTP/CST)	15/1
IEEE 802.3x Flow Control and back-pressure	Yes
IEEE 802.3 10Base-T	Yes
IEEE 802.3u 100Base-TX	Yes
IEEE 802.3z 1000Base-SX/LX	Yes
IEEE 802.3ab 1000Base-T	Yes
IEEE 802.3ae 10 Gigabit Ethernet	4xx and 5xx Family
IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications	Yes
Storm Control	Yes (except FS-108D-POE, FS-224D-POE)
MAC, IP, Ethertype-based VLANs	Yes
Virtual-Wire	Yes
Split Port (QSFP+ breakout to 4xSFP+)	FS-5xx Family
Time-Domain Reflectcometry (TDR) Support	Yes (except FS-108D-POE, FS-224D-POE)

FEATURES

	FORTISWITCH STANDALONE MODE
Layer 3*	
Static Routing (Hardware-based)	Yes
Routing Entries	64 on FS-2xx, 4xx Family; 16K on FS-5xx Family
Host Entries	4K on FS-2xx, 4xx Family; 24K on FS-5xx Family
Dynamic Routing Protocols**	OSPFv2, RIPv2, VRRP
ECMP	FS-5xx Family
Bidirectional Forwarding Detection (BFD)	Yes
DHCP Relay	Yes
Services	
IGMP Snooping	Yes (except FS-108D-POE, FS-224D-POE)
Security and Visibility	
Port Mirroring	Yes
Admin Authentication Via RFC 2865 RADIUS	Yes
IEEE 802.1x authentication Port-based	Yes
IEEE 802.1x Authentication MAC-based	Yes
IEEE 802.1x Guest and Fallback VLAN	Yes
IEEE 802.1x MAC Access Bypass (MAB)	Yes
IEEE 802.1x Dynamic VLAN Assignment	Yes
MAC-IP Binding	Yes
sFlow	Yes
ACL	1K entries on FS-5xx Family; 512 on FS-1xx, 2xx, 4xx Families; Not supported on FS-108D-POE, FS-224D-POE
IEEE 802.1ab Link Layer Discovery Protocol (LLDP)	Yes
IEEE 802.1ab LLDP-MED	Yes
DHCP-Snooping	Yes
Dynamic ARP Inspection	Yes
Sticky MAC and MAC Limit	Yes
High Availability	
Multi-Chassis Link Aggregation (MCLAG)	Yes (2xx, 4xx and 5xx)
Quality of Service	
IEEE 802.1p Based Priority Queuing	Yes (2xx, 4xx and 5xx)
IP TOS/DSCP Based Priority Queuing	Yes (2xx, 4xx and 5xx)
Management	
Telnet / SSH	Yes
HTTP / HTTPS	Yes
SNMP v1/v2c/v3	Yes
SNTP	Yes
Standard CLI and Web GUI Interface	Yes
Software download/upload: TFTP/FTP/GUI	Yes
Managed from FortiGate	Yes
Support for HTTP REST APIs for Configuration and Monitoring	Yes
Additional RFC and MIB Support	
RFC 2571 Architecture for Describing SNMP Framework	Yes
DHCP Client	Yes
RFC 854 Telnet Server	Yes
RFC 2865 RADIUS	Yes
RFC 1643 Ethernet-like Interface MIB	Yes
RFC 1213 MIB-II	Yes
RFC 1354 IP Forwarding Table MIB	Yes
RFC 2572 SNMP Message Processing and Dispatching	Yes
RFC 1573 SNMP MIB II	Yes
RFC 1157 SNMPv1/v2c	Yes
RFC 2030 SNTP	Yes

* Supported on 2xx, 4xx and 5xx. ** Requires 'Advanced Features' License.

SPECIFICATIONS

	FORTISWITCH 108D-POE	FORTISWITCH 124D	FORTISWITCH 124D-POE
Hardware Specifications			
Total Network Interfaces	8x GE RJ45 ports and 2x GE RJ45/SFP combo ports	24x GE/RJ45 ports and 2x GE SFP ports	24x GE/RJ45 ports and 2x GE SFP ports
Dedicated Management 10/100 Port	0	0	1
RJ-45 Serial Console Port	0	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount Appliance	1 RU Rack Mount Appliance
Power over Ethernet (PoE) Ports	8 (802.3af)	0	12 (802.3af/802.3at)
PoE Power Budget	75 W	0	100 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	20 Gbps	52 Gbps	52 Gbps
Packets Per Second	40 Mpps	77 Mpps	77 Mpps
MAC Address Storage	16K	8K	16K
Network Latency	< 2µs	< 1µs	< 1µs
VLANs Supported	4K	4K	4K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	4	13	13
Packet Buffers	1 MB	1.5 MB	1.5 MB
DRAM	256 MB	512 MB	512 MB
FLASH	32 MB	64 MB	64 MB
Dimensions			
Height x Depth x Width (inches)	1.7 x 7.9 x 13	1.73 x 5.51 x 17.32	1.73 x 9 x 12.99
Height x Depth x Width (mm)	44 x 200 x 330	44 x 140 x 440	44 x 230 x 330
Weight	4.19 lbs (1.9 kg)	3.74 lbs (1.7 kg)	5.4 lbs (2.4 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
Power Consumption (Average / Maximum)	52.8 W / 95.1 W	14 W / 19 W	116 W / 116 W
Heat Dissipation	47.5 BTU/h	64.81 BTU/h	77 BTU/h
Operating Temperature	32–113°F (0–45°C)	32–122°F (0–50°C)	32–122°F (0–50°C)
Storage Temperature	-13–158°F (-25–70°C)	-4–158°F (-20–70°C)	-4–158°F (-20–70°C)
Humidity	5–90% 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		

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

FortiSwitch 108D-POE

FortiSwitch 124D

SPECIFICATIONS

	FORTISWITCH 224D-POE	FORTISWITCH 224D-FPOE
Hardware Specifications		
Total Network Interfaces	20x GE RJ45 ports and 4x GE RJ45/SFP combo ports	24x GE RJ45 ports and 4x GE SFP ports
Dedicated Management 10/100 Port	0	1
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	12 (802.3af)	24 (802.3af/802.3at)
PoE Power Budget	180 W (802.11af)	370 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity	48 Gbps	56 Gbps
Packets Per Second	71 Mpps	83 Mpps
MAC Address Storage	16K	16K
Network Latency	< 2µs	< 1µs
VLANs Supported	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	NA	Yes
Link Aggregation Group Size	8	8
Total Link Aggregation Groups	12	14
Packet Buffers	1 MB	1.5 MB
DRAM	512 MB	512 MB
FLASH	128 MB	128 MB
Dimensions		
Height x Depth x Width (inches)	1.73 x 10.12 x 17.32	1.73 x 12.2 x 17.5
Height x Depth x Width (mm)	44 x 310 x 440	44 x 310 x 440
Weight	8.49 lbs (3.85 kg)	10.64 lbs (4.83 kg)
Environment		
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
Power Supply	AC built in	AC built in
Redundant Power	—	Optional FRPS-740
Power Consumption (Average / Maximum)	190 W / 225 W	380 W / 397 W
Heat Dissipation	83.5 BTU/h	85 BTU/h
Operating Temperature	32–104°F (0–40°C)	32–122°F (0–50°C)
Storage Temperature	-4–158°F (-20–70°C)	-4–158°F (-20–70°C)
Humidity	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	

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

FortiSwitch 224D-POE

FortiSwitch 224D-FPOE

SPECIFICATIONS

	FORTISWITCH 248D	FORTISWITCH 248D-POE	FORTISWITCH 248D-FPOE
Hardware Specifications			
Total Network Interfaces	48x GE RJ45 ports and 4x GE SFP ports	48x GE RJ45 ports and 2x GE SFP ports	48x 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)	48 (802.3af/802.3at)
PoE Power Budget	N/A	370 W	370 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	104 Gbps	104 Gbps	104 Gbps
Packets Per Second	155 Mpps	155 Mpps	155 Mpps
MAC Address Storage	16K	16K	16K
Network Latency	< 1µs	< 1µs	< 1µs
VLANs Supported	4K	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	Yes	Yes	Yes
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 16.93 x 17.32	1.73 x 16.1 x 17.3
Height x Depth x Width (mm)	44 x 246 x 440	44 x 430 x 440	44 x 410 x 440
Weight	7.81 lbs (3.54 kg)	13.67 lbs (6.20 kg)	15.4 lbs (7.01 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
Power Consumption (Average / Maximum)	38.66 W / 39.19 W	476 W / 476 W	410 W / 411 W
Heat Dissipation	134 BTU/h	180 BTU/h	188 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	

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

FortiSwitch 248D

FortiSwitch 248D-POE

FortiSwitch 248D-FPOE

SPECIFICATIONS

	FORTISWITCH 224E	FORTISWITCH 224E-POE	FORTISWITCH 248E-POE	FORTISWITCH 248E-FPOE
Hardware Specifications				
Total Network Interfaces	24x GE RJ45 ports and 4x GE SFP ports	24x GE RJ45 ports and 4x GE SFP ports	48x GE RJ45 ports and 4x GE SFP ports	48x GE RJ45 ports and 4x GE SFP ports
Dedicated Management 10/100 Port	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	NA	12 (802.3af/802.3at)	24 (802.3af/802.3at)	48 (802.3af/802.3at)
PoE Power Budget	NA	180 W	370 W	740 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years	> 10 years
System Specifications				
Switch Type	Web and CLI Managed	Web and CLI Managed	Web and CLI Managed	Web and CLI Managed
Switching Capacity	56 Gbps	56 Gbps	104 Gbps	104 Gbps
Packets Per Second	83 Mpps	83 Mpps	155 Mpps	155 Mpps
MAC Address Storage	16 K	16 K	16 K	16 K
Network Latency	< 1us	< 1us	< 1us	< 1us
VLANs Supported	4 K	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8	8
Total Link Aggregation Groups	14	14	26	26
Packet Buffers	1.5 MB	1.5 MB	1.5 MB	1.5 MB
DRAM	512 MB	512 MB	512 MB	512 MB
FLASH	128 MB	128 MB	128 MB	128 MB
Dimensions				
Height x Depth x Width (inches)	1.73 x 9 x 12.99	1.73 x 9 x 12.99	1.73 x 16.1 x 17.3	1.73 x 16.1 x 17.3
Height x Depth x Width (mm)	44 x 230 x 330	44 x 230 x 330	44 x 410 x 440	44 x 410 x 440
Weight	4.78 lbs (2.17 kg)	5.37 lbs (2.44 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	100–240V AC, 50–60 Hz
Power Supply	AC built in	AC built in	AC built in	AC built in
Redundant Power	Redundant AC	Optional FRPS-740	Optional FRPS-740	Optional FRPS-740
Power Consumption (Average / Maximum)	17.2 W / 17.3 W	23.5 W / 23.6 W	51.6 W / 51.9 W	47.5 W / 47.7 W
Heat Dissipation	59.095 BTU/h	74.29554 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)	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)	-4–158°F (-20–70°C)
Humidity	10–90%	10–90%	10–90%	10–90%
Certification and Compliance				
		FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2		
Warranty				
Fortinet Warranty		Limited lifetime* warranty on all models		

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

FortiSwitch 224E

FortiSwitch 224E-POE

FortiSwitch 248E-POE

FortiSwitch 248E-FPOE

SPECIFICATIONS

	FORTISWITCH 424D	FORTISWITCH 424D-POE	FORTISWITCH 424D-FPOE
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	—	24 (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	131 Mpps	131 Mpps	131 Mpps
MAC Address Storage	16K	16K	16K
Network Latency	< 1μs	< 1μs	< 1μs
VLANs Supported	4K	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	Yes	Yes	Yes
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	Limited lifetime* warranty on all models		

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

FortiSwitch 424D

FortiSwitch 424D-POE

FortiSwitch 424D-FPOE

SPECIFICATIONS

	FORTISWITCH 448D	FORTISWITCH 448D-POE	FORTISWITCH 448D-FPOE
Hardware Specifications			
Total Network Interfaces	48x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	48x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	48x GE RJ45 and 4x10 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	—	48 (802.3af/at)	48 (802.3af/at)
PoE Power Budget	N/A	370 W	740 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	176 Gbps	176 Gbps	176 Gbps
Packets Per Second	262 Mpps	262 Mpps	262 Mpps
MAC Address Storage	16K	16K	16K
Network Latency	< 1µs	< 1µs	< 1µs
VLANs Supported	4K	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	Yes	Yes	Yes
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	1 GB	1 GB	1 GB
FLASH	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 440	44 x 410 x 440
Weight	9.15 lbs (4.15 kg)	13.44 lbs (6.1 kg)	15.45 lbs (7.01 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	Dual power supplies
Power Consumption (Average / Maximum)	38 W / 38 W	417 W / 419 W	790 W / 792 W
Heat Dissipation	147 BTU/h	177 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 (-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		

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

FortiSwitch 448D

FortiSwitch 448D-POE

FortiSwitch 448D-FPOE

SPECIFICATIONS

	FORTISWITCH 524D	FORTISWITCH 524D-FPOE	FORTISWITCH 548D	FORTISWITCH 548D-FPOE
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 compatible 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	428 Mpps	428 Mpps	512 Mpps	512 Mpps
MAC Address Storage	96K	96K	96K	96K
Network Latency	< 2µs	< 2µs	< 2µs	< 2µs
VLANs Supported	4K	4K	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	Yes	Yes	Yes	Yes
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
Weight	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				
		FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2		
Warranty				
Fortinet Warranty		Limited lifetime* warranty on all models		

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

FortiSwitch 524D

FortiSwitch 524D-FPOE

FortiSwitch 548D

FortiSwitch 548D-FPOE

ORDER INFORMATION

Product	SKU	Description
FortiSwitch 108D-POE	FS-108D-POE	L2 PoE Switch — 8x GE RJ45 ports (including 8x PoE ports with 75 W power budget), 2x shared media pairs (including 2x GE RJ45, 2x GE SFP slots). Fanless switch. FortiGate switch controller compatible.
FortiSwitch 124D	FS-124D	L2 Switch — 24x GE RJ45 ports, 2x GE SFP slots. Fanless switch. FortiGate switch controller compatible.
FortiSwitch 124D-POE	FS-124D-POE	L2 PoE Switch — 24x GE RJ45 ports (including 12x PoE+ ports with 100 W power budget), 2x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 224D-POE	FS-224D-POE	L2 PoE Switch — 20x GE RJ45 ports (including 12x PoE ports with 185 W power budget), 4x shared media pairs (including 4x GE RJ45, 4x GE SFP slots). FortiGate switch controller compatible.
FortiSwitch 224D-FPOE	FS-224D-FPOE	L2 PoE+ Switch — 24x GE RJ45 ports, 2x 1 GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248D	FS-248D	L2 Switch — 48x GE RJ45 ports, 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248D-POE	FS-248D-POE	L2 PoE Switch — 48x GE RJ45 ports (24 PoE), 2x 1 GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248D-FPOE	FS-248D-FPOE	L2 PoE+ Switch — 48x GE RJ45 ports, 4x 1 GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 224E	FS-224E	L2/L3 Switch — 24x GE RJ45 ports, 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 224E-POE	FS-224E-POE	L2/L3 PoE+ Switch — 24x GE RJ45 ports including 12x PoE+ ports, 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248E-POE	FS-248E-POE	L2/L3 PoE+ Switch — 48x GE RJ45 ports (24 PoE capable), 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248E-FPOE	FS-248E-FPOE	L2/L3 PoE+ Switch — 48x GE RJ45 ports full PoE+, 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 424D	FS-424D	L2 Switch — 24x GE RJ45 ports, 2x 10 GE SFP+ ports, FortiGate switch controller compatible.
FortiSwitch 424D-POE	FS-424D-POE	L2 PoE+ Switch — 24x GE RJ45 ports, 2x 10 GE SFP+ slots. 185 W power budget. FortiGate switch controller compatible.
FortiSwitch 424D-FPOE	FS-424D-FPOE	L2 PoE+ Switch — 24x GE RJ45 ports, 2x 10 GE SFP+ slots. FortiGate switch controller compatible.
FortiSwitch 448D	FS-448D	L2 Switch — 48x GE RJ45 ports, 4x 10 GE SFP+ slots. FortiGate switch controller compatible.
FortiSwitch 448D-POE	FS-448D-POE	L2 PoE+ Switch (185 W) — 48x GE RJ45 ports, 4x 10 GE SFP+ slots. FortiGate switch controller compatible.
FortiSwitch 448D-FPOE	FS-448D-FPOE	L2 PoE+ Switch (370 W) — 48x GE RJ45 ports, 4x 10 GE SFP+ slots. FortiGate switch controller compatible.
FortiSwitch 524D	FS-524D	L2 Switch — 24x GE RJ45 ports, 4x 10 GE SFP+ slots, 2x 40 GE QSFP+ slots. FortiGate switch controller compatible.
FortiSwitch 524D-FPOE	FS-524D-FPOE	L2 PoE+ Switch — 24x GE RJ45 ports, 4x 10 GE SFP+ slots, 2x 40 GE QSFP+ slots. FortiGate switch controller compatible.
FortiSwitch 548D	FS-548D	L2 Switch — 48x GE RJ45 ports, 4x 10 GE SFP+ slots, 2x 40 GE QSFP+ slots. FortiGate switch controller compatible.
FortiSwitch 548D-FPOE	FS-548D-FPOE	L2 PoE+ Switch — 48x GE RJ45 ports, 4x 10 GE SFP+ slots, 2x 40 GE QSFP+ slots. FortiGate switch controller compatible.
Accessories		
FortiSwitch Advanced Features License	FS-SW-LIC-200	SW License for FS-200 Series Switches to activate Advanced Features.
	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-124D-POE, FS-224D-FPOE, FS-248D-FPOE, FS-424D-FPOE, FS-448D-POE and FS-424D-POE.
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-FPOE.*

* Provides additional PoE capacity.

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

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