F

FortiSwitch[™] Secure Campus



Highlights

- Standalone or Integrated FortiLink deployment option
- On premise and cloudbased management options
- Zero-touch deployment
- Entry level network access control at no cost
- Role and device-based access control and policy enforcement
- Dynamic segmentation and Micro Segmentation
- Secure access service edge (SASE) support
- Up to 48 access ports in a compact 1 RU form factor
- Stacking up to 300 switches per FortiGate
- Wire-speed switching with up to 100GE uplinks

Security, Performance, and Manageability

The FortiSwitch[™] campus family offers an unparalleled combination of security, performance, and manageability, making it the ideal choice for the enterprise campus that prioritize safeguarding against threats.

As campus network design continues to adapt to emerging technologies and evolving business requirements, the FortiSwitch enterprise campus switching architecture empowers network administrators with enhanced visibility, control, and manageability. The platform's scalability, agility, and ease of management contribute to a highly secure environment, providing a robust foundation for any sized campus.

Secure Networking through FortiLink

Available in

Appliance

::===

FortiLink is an innovative proprietary management protocol that enables seamless integration and management between a FortiGate Next-Generation Firewall and the FortiSwitch Ethernet switching platform. By using FortiLink, the FortiSwitch becomes a logical extension of the FortiGate, allowing for centralized management of both network security and access layer functions through a single interface.

Native Entry-Level Network Access Control at No Cost

FortiLink integration enables basic Network Access Control (NAC) functionality to profile and securely onboard devices as they connect. FortiLink NAC offers visibility, automated segmentation, and microsegmentation of IoT devices, quarantine if compromised, and virtual patching to help protect against threats.

Dynamic Segmentation and Policy Enforcement

Implementing dynamic port-level security in a large campus Ethernet switching environment traditionally requires hands-on effort and ongoing maintenance. FortiSwitch campus switching architecture automates dynamic segmentation through FortiLink, empowering IT administrators to control traffic within segments, limiting the scope of threats. The automation of segmentation makes making policy enforcement easier and more efficient, while NGFW-level policies ensure granular control and zero-trust access for users and devices.



Role and Device-based Access Control and Policy Enforcement

Whether leveraging Fortinet Identity Access Management (IAM) or third-party identity providers, FortiLink automation can leverage identity to make granular role-based policy decisions.

Secure Access Service Edge (SASE)

This FortiSwitch enterprise architecture offers a built-in foundation for zero-trust network access (ZTNA) and secure access service edge (SASE), allowing you the flexibility to easily deploy the type and level of security you need at the edge of your network.

Operational Simplicity

Deploying, managing, and optimizing an Ethernet switching infrastructure has traditionally been challenging and time-consuming.

FortiSwitch switching architecture can be securely deployed and managed in minutes through zero-touch deployment. Whether FortiSwitch is deployed in standalone mode or FortiLink mode, automation and orchestration offer intuitive workflows and unified views to provision, manage, and optimize your campus. This is available through both FortiCloud and on-premises management.

Centralized management delivers a unified, single view of both the LAN and security. This provides a consistent user experience for optimal operational efficiency, simplifying management, optimization, and troubleshooting. The result is a shorter mean time to repair both network and security issues.



FortiOS

FortiEdge Cloud

Scalable Flexible Campus

FortiSwitch campus architecture scales to meet the need of today's next-generation campus without sacrificing security. Supporting up to 48 ports in a compact 1 RU form factor, FortiSwitch can deliver the performance and scale you require.

Eliminate Bottlenecks

Dedicated uplinks capable of speeds up to 100 GE through SFP+ SFP28 and QSFP28 slots can support your choice of media utilizing through a wide variety of transceivers.

Next Generation Power over Ethernet Support

With PoE+ support in all models and next-generation 90W 802.3bt PoE support in specific models, FortiSwitch delivers and manages power where needed for devices such as cameras, sensors, and wireless access points

Product Offerings

Model Numbers

400 Series: FS-424E-FIBER, FS-M426E-FPOE, FS-424E, FS-424E-POE, FS-424E-FPOE, FS-448E, FS-448E-POE, FS-448E-FPOE 500 Series: FS-548D, FS-548D-FPOE

600 Series: FS-624F, FS-624F-FPOE, FS-648F, FS-648F-FPOE

FS-T1024F-FPOE

Features

Refer to the FortiSwitch Feature Matrix for details about the features supported by each FortiSwitch model.

FORTISWITCH FORTILINK MODE (WITH FORTIGATE)	FORTISWITCH FORTILINK MODE (WITH FORTIGATE)
Management and Configuration	Security and Visibility
Auto Discovery of Multiple Switches	802.1X Authentication (Port-based, MAC-based, MAB)
Automated detection and recommendations	Block Intra-VLAN Traffic
Centralized VLAN Configuration	Clients Monitoring
Dynamic Port Profiles for FortiSwitch ports	Device Detection
FortiLink Secure Fabric	DHCP/ARP Monitor
FortiLink Stacking (Auto Inter-Switch Links)	DHCP Snooping
FortiSwitch Management over VXLAN	FortiGuard IoT identification
Health Monitoring	FortiSwitch recommendations in Security Rating
IGMP Snooping	Host Quarantine on Switch Port
L3 Routing and Services (FortiGate)	Integrated FortiGate Network Access Control (NAC) function
Link Aggregation Configuration	MAC Black/While Listing (FortiGate)
LLDP/MED	NAC Device Telemtry
Managed Switches 8 to 300 depending on FortiGate model	- Network Device Detection
Policy-Based Routing (FortiGate)	Policy Control of Users and Devices (FortiGate)
Provision firmware upon authorization	Port Statistics
Software Upgrade of Switches	Security Fabric Automation
Spanning Tree	
Switch POE Control	Switch Controller traffic collector
Virtual Domain (FortiGate)	Syslog Collection
High Availability	UTM Features
Active-Active Split LAG from FortiGate to FortiSwitches for Advanced Redundancy	Firewall (FortiGate)
LAG support for FortiLink Connection	IPC, AV, Application Control, Botnet (FortiGate)
Support FortiLink FortiGate in HA Cluster	

Refer to the FortiSwitch Feature Matrix for details about the features supported by each FortiSwitch model.

FORTISWITCH	FORTISWITCH
Layer 2	Layer 3
Auto-negotiation for Port Speed and Duplex	Bidirectional Forwarding Detection (BFD)
Auto topology	DHCP Relay
Dynamically shared packet buffers	DHCP server
Edge Port / Port Fast	Dynamic Routing Protocols: OSPFv2, RIPv2, VRRP, BGP, ISIS *
IEEE 802.1ad QinQ	ECMP
IEEE 802.1AX Link Aggregation	Filtering routemaps based on routing protocol
IEEE 802.1D MAC Bridging/STP	IP conflict detection and notification
IEEE 802.1Q VLAN Tagging	IPv6 route filtering
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)	Multicast Protocols: PIM-SSM *
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)	Static Routing (Hardware-based)
IEEE 802.3 10Base-T	Unicast Reverse Path Forwarding - uRPF
IEEE 802.3ab 1000Base-T	Security and Visibility
IEEE 802.3ad Link Aggregation with LACP	ACL
IEEE 802.3ae 10 Gigabit Ethernet	ACL Multiple Ingress
IEEE 802.3az Energy Efficient Ethernet	ACL Multiple Ingress
IEEE 802.3ba, 802.3bj, and 802.3bm 40 and 100 Gigabit Ethernet	ACL Multislage
IEEE 802.3bz Multi Gigabit Ethernet	Admin Authentication Via RFC 2865 RADIUS
IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications	
IEEE 802.3u 100Base-TX	Assign VLANs via Radius attributes (RFC 4675)
IEEE 802.3x Flow Control and Back-pressure	DHCP-Snooping
IEEE 802.3z 1000Base-SX/LX	Dynamic ARP Inspection
Ingress Pause Metering	Flow Export (NetFlow and IPFIX)
Jumbo Frames	IEEE 802.1ab Link Layer Discovery Protocol (LLDP)
LAG min/max bundle	IEEE 802.1ab LLDP-MED
Loop Guard	IEEE 802.1ae MAC Security (MAC Sec)
MAC, IP, Ethertype-based VLANs	IEEE 802.1X Authentication MAC-based
MDI/MDIX Auto-crossover	IEEE 802.1X Authentication Port-based
Per-port storm control	IEEE 802.1X Dynamic VLAN Assignment
Priority-based Flow Control (802.1Qbb)	IEEE 802.1X EAP pass-through
Private VLAN	IEEE 802.1X Guest and Fallback VLAN
Rapid PVST interoperation	IEEE 802.1X MAC Access Bypass (MAB)
Spanning Tree Instances (MSTP/CST)	IEEE 802.1X open auth
Split Port	IP source guard
Storm Control	IPv6 RA Guard
STP BPDU Guard	LLDP-MED ELIN support
STP Root Guard	MAC-IP Binding
Time-Domain Reflectcometry (TDR) Support	Per-port and per-VLAN MAC learning limit
Unicast/Multicast traffic balance over trunking port	Port Mirroring
(dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac) Virtual-Wire	Radius Accounting
	Radius CoA (Change of Authority)
VLAN Mapping Services	sFlow
	Sticky MAC and MAC Limit
IGMP proxy / querier	Wake on LAN
IGMP Snooping	*Requires 'Advanced Features' License.
MLD proxy / querier	

Refer to the FortiSwitch Feature Matrix for details about the features supported by each FortiSwitch model.

High Availability Multi-Chassis Link Aggregation (MCLAG) Quality of Service Egress priority tagging Explicit Congestion Notification IEEE 1588 PTP (Transparent and Boundary Clock) IEEE 802.1p Based Priority Queuing
Quality of Service Egress priority tagging Explicit Congestion Notification IEEE 1588 PTP (Transparent and Boundary Clock)
Egress priority tagging Explicit Congestion Notification IEEE 1588 PTP (Transparent and Boundary Clock)
Explicit Congestion Notification IEEE 1588 PTP (Transparent and Boundary Clock)
IEEE 1588 PTP (Transparent and Boundary Clock)
IEEE 802.1p Based Priority Queuing
IP TOS/DSCP Based Priority Queuing
Percentage Rate Control

FORTISWITCH
Management
Automation Stitches
Display Average Bandwidth and Allow Sorting on Physical Port / Interface Traffic
Dual Firmware Support
HTTP / HTTPS
IPv4 and IPv6 Management
Link Monitor
Managed from FortiGate
Packet Capture
POE Control Modes
Provide warning if L2 table is getting full
RMON Group 1
SNMP v1/v2c/v3
SNMP v3 traps
SNTP
Software download/upload: TFTP/FTP/GUI
SPAN, RSPAN, and ERSPAN
Standard CLI and Web GUI Interface
Support for HTTP REST APIs for Configuration and Monitoring
Syslog UDP/TCP
System alias command
System Temperature and Alert
Telnet / SSH

	ALL FORTISWITCH MODELS
RFC	and MIB Support*
BFD	
RFG	C 5880: Bidirectional Forwarding Detection (BFD)
RFG	C 5881: Bidirectional Forwarding Detection (BFD) for IPv4 and IPv6 (Single Hop)
RFG	C 5882: Generic Application of Bidirectional Forwarding Detection (BFD)
BGP	
RFG	C 1771: A Border Gateway Protocol 4 (BGP-4)
RF	C 1965: Autonomous System Confederations for BGP
RF	C 1997: BGP Communities Attribute
RFG	C 2545: Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing
RF	C 2796: BGP Route Reflection - An Alternative to Full Mesh IBGP
RFG	C 2842: Capabilities Advertisement with BGP-4
RFG	C 2858: Multiprotocol Extensions for BGP-4
RFG	C 4271: BGP-4
RFG	C 6286: Autonomous-System-Wide Unique BGP Identifier for BGP-4
RFG	C 6608: Subcodes for BGP Finite State Machine Error
RFG	C 6793: BGP Support for Four-Octet Autonomous System (AS) Number Space
RFG	C 7606: Revised Error Handling for BGP UPDATE Messages
RFG	C 7607: Codification of AS 0 Processing
	C 7705: Autonomous System Migration Mechanisms and Their Effects on the BGP _PATH Attribute
RF	C 8212: Default External BGP (EBGP) Route Propagation Behavior without Policies
RF	C 8654: Extended Message Support for BGP
DHC	P
RFG	C 2131: Dynamic Host Configuration Protocol
RF	C 3046: DHCP Relay Agent Information Option
RF	C 7513: Source Address Validation Improvement (SAVI) Solution for DHCP
IP/IP	v4
RF	C 2697: A Single Rate Three Color Marker
RF	C 3168: The Addition of Explicit Congestion Notification (ECN) to IP
RF	C 5227: IPv4 Address Conflict Detection
RF	C 5517: Cisco Systems' Private VLANs: Scalable Security in a Multi-Client Environment
RF	C 7039: Source Address Validation Improvement (SAVI) Framework
IP Mu	ulticast
RF	C 2710: Multicast Listener Discovery (MLD) for IPv6 (MLDv1)
RFG	C 3569: An Overview of Source-Specific Multicast (SSM)
	C 4541: Considerations for Internet Group Management Protocol (IGMP) and Multicas tener Discovery (MLD) Snooping Switches
	C 4605: Internet Group Management Protocol (IGMP)/Multicast Listener Discovery LD)-Based Multicast Forwarding ("IGMP/MLD Proxying")
RFG	C 4607: Source-Specific Multicast for IP

	ALL FORTISWITCH MODELS
FC and MI	3 Support*
Pv6	
	: Transmission of IPv6 Packets over Ethernet Networks: Transmission of IPvi ver Ethernet Networks
RFC 2474 Headers (: Definition of the Differentiated Services Field (DS Field) in the and IPv6 DSCP)
RFC 2893	: Transition Mechanisms for IPv6 Hosts and Routers
RFC 4213	Basic Transition Mechanisms for IPv6 Hosts and Router
RFC 4291	IP Version 6 Addressing Architecture
	: Internet Control Message Protocol (ICMPv6) for the Internet Protocol Versi pecification
RFC 4861	Neighbor Discovery for IP version 6 (IPv6)
RFC 4862	IPv6 Stateless Address Auto configuration
RFC 5095	Deprecation of Type 0 Routing Headers in IPv6
RFC 6724	Default Address Selection for Internet Protocol version 6 (IPv6)
RFC 7113:	IPv6 RA Guard
RFC 8200	Internet Protocol, Version 6 (IPv6) Specification
RFC 8201	Path MTU Discovery for IP version 6
S-IS	
RFC 1195:	Use of OSI IS-IS for Routing in TCP/IP and Dual Environments
RFC 5308	Routing IPv6 with IS-IS
1IB	
RFC 1213:	MIB II parts that apply to FortiSwitch 100 units
RFC 1354	IP Forwarding Table MIB
RFC 1493	Bridge MIB
RFC 1573	SNMP MIB II
RFC 1643	Ethernet-like Interface MIB
RFC 1724	RIPv2-MIB
RFC 1850	OSPF Version 2 Management Information Base
RFC 2233	: The Interfaces Group MIB using SMIv2
RFC 2618	Radius-Auth-Client-MIB
RFC 2620	Radius-Acc-Client-MIB
RFC 2665	Definitions of Managed Objects for the Ethernet-like Interface Types
	Definitions of Managed Objects for Bridges with Traffic Classes, Multicast nd Virtual LAN extensions
RFC 2787	Definitions of Managed Objects for the Virtual Router Redundancy Protocol
RFC 2819	Remote Network Monitoring Management Information Base
RFC 2863	: The Interfaces Group MIB
RFC 2932	: IPv4 Multicast Routing MIB
RFC 2934	Protocol Independent Multicast MIB for IPv4
RFC 3289	Management Information Base for the Differentiated Services Architecture
RFC 3433	Entity Sensor Management Information Base
RFC 3621	Power Ethernet MIB
	: Entity MIB (Version 4)

ALL FORTISWITCH MODELS	
RFC and MIB Support*	
OSPF	
RFC 1583: OSPF version 2	
RFC 1765: OSPF Database Overflow	
RFC 2328: OSPF version 2	
RFC 2370: The OSPF Opaque LSA Option	
RFC 2740: OSPF for IPv6	
RFC 3101: The OSPF Not-So-Stubby Area (NSSA) Option	
RFC 3137: OSPF Stub Router Advertisement	
RFC 3623: OSPF Graceful Restart	
RFC 5340: OSPF for IPv6 (OSPFv3)	
RFC 5709: OSPFv2 HMAC-SHA Cryptographic Authentication	
RFC 6549: OSPFv2 Multi-Instance Extensions	
RFC 6845: OSPF Hybrid Broadcast and Point-to-Multipoint Interface Type	
RFC 6860: Hiding Transit-Only Networks in OSPF	
RFC 7474: Security Extension for OSPFv2 When Using Manual Key Management	
RFC 7503: OSPF for IPv6	
RFC 8042: CCITT Draft Recommendation T.4	
RFC 8362: OSPFv3 Link State Advertisement (LSA) Extensibility	
OTHER	
RFC 2030: SNTP	
RFC 3176: InMon Corporation's sFlow: A Method for Monitoring Traffic in Switched a Routed Networks	nd
RFC 3768: VRRP	
RFC 3954: Cisco Systems NetFlow Services Export Version 9	
RFC 5101: Specification of the IP Flow Information Export (IPFIX) Protocol for the Exchange of Flow Information	
RFC 5798: VRRPv3 (IPv4 and IPv6)	

	ALL FORTISWITCH MODELS
RFC	C and MIB Support*
RAI	DIUS
R	FC 2865: Admin Authentication Using RADIUS
R	FC 2866: RADIUS Accounting
R	FC 4675: RADIUS Attributes for Virtual LAN and Priority Support
	FC 5176: Dynamic Authorization Extensions to Remote Authentication Dial In User ervice (RADIUS)
RIP	
R	FC 1058: Routing Information Protocol
R	FC 2080: RIPng for IPv6
R	FC 2082: RIP-2 MD5 Authentication
R	FC 2453: RIPv2
R	FC 4822: RIPv2 Cryptographic Authentication
SNI	MP
R	FC 1157: SNMPv1/v2c
R	FC 2571: Architecture for Describing SNMP
R	FC 2572: SNMP Message Processing and Dispatching
R	FC 2573: SNMP Applications
R	FC 2576: Coexistence between SNMP versions

	FORTISWITCH-424E-FIBER	FORTISWITCH-M426E-FPOE
Hardware Specifications		
Total Network Interfaces	24x GE SFP and 4× 10GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	16x GE RJ45, 8× 2.5 GE RJ45 ports, 2× 5 GE RJ45, and 4× 10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP
Dedicated Management 10/100 Port	1	1
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	N/A	24 [16× 802.3af/at, 8× 802.3af/at/UPOE (60W)]
PoE Power Budget	N/A	420 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity (Duplex)	128 Gbps	172 Gbps
Packets Per Second (Duplex)	190 Mpps	255 Mpps
MAC Address Storage	32 K	16 K
Network Latency	< 1µs	< 1µs
VLANs Supported	4 K	4 K
Link Aggregation Group Size	8	8
Total Link Aggregation Groups	Up to number of ports	Up to number of ports
Packet Buffers	4 MB	2 MB
Memory	1 GB DDR4	1 GB DDR4
Flash	256 MB	256 MB
ACL	1.5k	1k
Spanning Tree Instances	32	32
Route Entries (IPv4/IPv6)	16k/8k	1k/1k
Multicast Route Entries	4k	1k
Host Entries (IPv4/IPv6)	16k/7k	5k/2.4k
Dimensions		
Height x Depth x Width (inches)	1.75 × 7.87 × 17.3	1.73 × 16.14 × 17.3
Height x Depth x Width (mm)	44 × 200 × 440	44 × 410 × 440
Weight	5.62 lbs (2.55 kg)	13.00 lbs (5.9 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	Redundant AC	Redundant AC
Power Consumption* (Average / Maximum)	36 W / 38 W	441 W / 442 W
Heat Dissipation	132.5 BTU/h	132.734 BTU/h
Operating Temperature	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)
Storage Temperature	-4°F to 158°F (-20°C to 70°C)	-4°F to 158°F (-20°C to 70°C)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing
Air-Flow Direction	side-to-back	side-to-back
Noise Level	32.8 dBA	35 dBA
Certification and Compliance		

Warranty

Fortinet Warranty

FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2 Limited lifetime** warranty on all models

* POE models power consumption is similar to non-POE model if POE is not in use

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



FortiSwitch 424E-Fiber

FortiSwitch M426E-FPOE

	FORTISWITCH 424E	FORTISWITCH 424E-POE	FORTISWITCH 424E-FPOE
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 and 4×10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	24x GE RJ45 and 4×10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	24x GE RJ45 and 4×10 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	250 W	421 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity (Duplex)	128 Gbps	128 Gbps	128 Gbps
Packets Per Second (Duplex)	190 Mpps	190 Mpps	190 Mpps
MAC Address Storage	16 K	16 K	16 K
Network Latency	< 1µs	< 1µs	< 1µs
VLANs Supported	4 K	4 К	4 К
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	Up to number of ports	Up to number of ports	Up to number of ports
Packet Buffers	2 MB	2 MB	2 MB
Memory	1 GB DDR4	1 GB DDR4	1 GB DDR4
Flash	256 MB	256 MB	256 MB
ACL	1k	1k	1k
Spanning Tree Instances	32	32	32
Route Entries (IPv4/IPv6)	1k/1k	1k/1k	1k/1k
Multicast Route Entries	1k	1k	1k
Host Entries (IPv4/IPv6)	5k/2.4k	5k/2.4k	5k/2.4k
Dimensions			
Height x Depth x Width (inches)	1.75 × 10.23 × 17.3	1.75 × 16.14 × 17.3	1.75 × 16.14 × 17.3
Height x Depth x Width (mm)	44 × 260 × 440	44 × 410 × 440	44 × 410 × 440
Weight	6.83 lbs (3.1 kg)	11.57 lbs (5.25 kg)	12.72 lbs (5.77 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	Redundant AC	Redundant AC	Redundant AC
Power Consumption* (Average / Maximum)	22.3 W / 23.6 W	281.3 W / 283.5 W	431.2 W / 433.7 W
Heat Dissipation	76.04 BTU/h	102.64 BTU/h	117.2 BTU/h
Operating Temperature	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	-4°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing
Air-Flow Direction	side-to-back	side-to-back	side-to-back
Noise Level	32.3 dBA	31.8 dBA	30.9 dBA
Certification and Compliance			

Warranty

Fortinet Warranty

FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2 Limited lifetime** warranty on all models

* POE models power consumption is similar to non-POE model if POE is not in use

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



FortiSwitch 424E

FortiSwitch 424E-FPOE

	FORTISWITCH 448E	FORTISWITCH 448E-POE	FORTISWITCH 448E-FPOE
Hardware Specifications			
Total Network Interfaces	48x GE RJ45 and 4× 10GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SF	48x GE RJ45 and 4× 10GE SFP+ ports P Note: SFP+ ports are compatible with 1 GE SFP	48x GE RJ45 and 4× 10GE 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	—	421 W	772 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity (Duplex)	176 Gbps	176 Gbps	176 Gbps
Packets Per Second (Duplex)	262 Mpps	262 Mpps	262 Mpps
MAC Address Storage	32 K	32 K	32 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	Up to number of ports	Up to number of ports	Up to number of ports
Packet Buffers	4 MB	4 MB	4 MB
Memory	1GB DDR4	1GB DDR4	1GB DDR4
Flash	256 MB	256 MB	256 MB
ACL	1.5k	1.5k	1.5k
Spanning Tree Instances	32	32	32
Route Entries (IPv4/IPv6)	16k/8k	16k/8k	16k/8k
Multicast Route Entries	4k	4k	4k
Host Entries (IPv4/IPv6)	16k/7k	16k/7k	16k/7k
Dimensions			
Height x Depth x Width (inches)	1.75 × 12.2 × 17.3	1.73 × 16.1 × 17.3	1.73 × 16.1 × 17.3
Height x Depth x Width (mm)	44 × 310 × 440	44 × 410 × 440	44 × 410 × 440
Weight	9.17 lbs (4.16 kg)	13.8 lbs (6.26 kg)	14.04 lbs (6.37 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	Redundant AC	Redundant AC	Redundant AC
Power Consumption* (Average / Maximum)	46.5 W / 47.81 W	440.12 W / 442.234 W	921.4 W / 923.6 W
Heat Dissipation	163.032 BTU/h	163.066 BTU/h	163.1 BTU/h
Operating Temperature	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)
Storage Temperature	-4°F to 158°F (-20°C to 70°C)	-4°F to 158°F (-20°C to 70°C)	-4°F to 158°F (-20°C to 70°C)
Humidity	10% to 90% non condensing	10% to 90% non condensing	10% to 90% non condensing
Air-Flow Direction	side-to-back	side-to-back	side-to-back
Noise Level	35.5 dBA	38.3 dBA	50.7 dBA
Certification and Compliance			
		FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	

FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2

Limited lifetime** warranty on all models

Warranty Fortinet Warranty

* POE models power consumption is similar to non-POE model if POE is not in use

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



FortiSwitch 448E

	FORTISWITCH 548D	FORTISWITCH 548D-FPOE
Hardware Specifications		
Total Network Interfaces	48x GE/RJ45 ports, 4× 10 GE SFP+ ports and 2× 40 GE QSFP+ Note: SFP+ ports are compatible with 1G SFP	48x GE/RJ45 ports, 4× 10 GE SFP+ ports and 2× 40 GE QSFP+ Note: SFP+ ports are compatible with 1G SFP
Dedicated Management 10/100/1000 Ports	1	1
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	N/A	48 (802.3af/at)
PoE Power Budget (single/dual PSU)	N/A	750 W / 1440 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity (Duplex)	336 Gbps	336 Gbps
Packets Per Second (Duplex)	512 Mpps	512 Mpps
MAC Address Storage	36 K	36 K
Network Latency	< 2µs	< 2µs
VLANs Supported	4 K	4 K
Link Aggregation Group Size	48	48
Total Link Aggregation Groups	Up to number of ports	Up to number of ports
Packet Buffers	4 MB	4 MB
Memory	2 GB DDR3	2 GB DDR3
Flash	128 MB	128 MB
ACL	1k	1k
Spanning Tree Instances	64	64
Route Entries (IPv4/IPv6)	16k/8k	16k/8k
Multicast Route Entries	8k	8k
Host Entries (IPv4/IPv6)	16k/7k	16k/7k
Dimensions		
Height x Depth x Width (inches)	1.75 × 13.8 × 17.3	1.75 × 13.8 × 17.3
Height x Depth x Width (mm)	44 × 350 × 439	44 × 350 × 439
Weight	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
Power Supply	150 W AC PSU*	920 W AC PSU*
Redundant Power	Optional FS-PSU-150*	Optional FS-PSU-920*
Power Consumption** (Average / Maximum)	74 W / 77 W	925 W / 961 W (full PoE load for single power supply)
Heat Dissipation	252 BTU/h	318 BTU/h (full PoE load for single power supply)
Operating Temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing
Air-Flow Direction	front-to-back	front-to-back
Noise Level	57.3 dBA	57.3 dBA
Certification and Compliance		
	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2
Warranty		
Fortinet Warranty	Limited lifetime*** warranty on all models	Limited lifetime*** warranty on all models

*FS-524D, FS-524D-FPOE, FS-548D, FS-548D-FPOE Power Supply Units are Hot-Swappable.

** POE models power consumption is similar to non-POE model if POE is not in use

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





	FORTISWITCH 624F	FORTISWITCH 624F-FPOE
Hardware Specifications		
Total Network Interfaces	24× 1GE/2.5GE/5GE RJ45 ports and	24× 1GE/2.5GE/5GE RJ45 ports and
	4× 10GE/25GE SFP+/SFP28 ports	4× 10GE/25GE SFP+/SFP28 ports
Dedicated Management 10/100/1000 Ports	1	1
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	_	24 (802.3 af/at/bt type 4)
oE Power Budget	_	1440 W
Nean Time Between Failures	> 10 years	> 10 years
ystem Specifications		
witching Capacity (Duplex)	440 Gbps	440 Gbps
ackets Per Second (Duplex)	654 Mpps	654 Mpps
AC Address Storage	64 k	64 k
letwork Latency	<1µs	<1µs
/LANs Supported	4 k	4 k
ink Aggregation Group Size	28	28
otal Link Aggregation Groups	Up to number of ports	Up to number of ports
Packet Buffers	8 MB	8 MB
lemory	4GB DDR4	4GB DDR4
lash	32 MB	32 MB
Drive	32G SSD	32G SSD
panning Tree Instances	64	64
coute Entries (IPv4/IPv6)	330k/112k	330k/112k
lost Entries (IPv4/IPv6)	16k/5k	16k/5k
limensions		
leight x Depth x Width (inches)	1.75 × 17.4 × 17.3	1.75 × 17.4 × 17.3
eight x Depth x Width (mm)	44 × 442 × 440	44 × 442 × 440
Veight (kg)	6.925	7.407
invironment		
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Consumption (Maximum)	240W	1680W
Power Supply	2× 350W	2× 1200W
Redundant Power	Dual hot swappable AC	Dual hot swappable AC
leat Dissipation	423 BTU/h	969 BTU/h
perating Temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
lumidity	5% to 95% RH non-condensing	5% to 95% RH non-condensing
ir-Flow Direction	front-to-back	front-to-back
Noise Level	54.88 dBA	54.88 dBA
Certification and Compliance		
	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2
Narranty		

Fortinet Warranty

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



Limited lifetime** warranty on all models

	FORTISWITCH 648F	FORTISWITCH 648F-FPOE	
lardware Specifications			
otal Network Interfaces	32× 1GE/2.5GE, 16× 1GE/2.5GE/5GE RJ45 ports and	32× 1GE/2.5GE, 16× 1GE/2.5GE/5GE RJ45 ports and	
	8×10GE/25GE SFP+/SFP28 ports	8× 10GE/25GE SFP+/SFP28 ports	
edicated Management 10/100/1000 Ports	1	1	
J-45 Serial Console Port	1	1	
orm Factor	1 RU Rack Mount	1 RU Rack Mount	
ower over Ethernet (PoE) Ports	—	48 (802.3 af/at/bt type 4)	
DE Power Budget	_	1800 W	
ean Time Between Failures	> 10 years	> 10 years	
ystem Specifications			
witching Capacity (Duplex)	720 Gbps	720 Gbps	
ackets Per Second (Duplex)	1071 Mpps	1071 Mpps	
AC Address Storage	64 k	64 k	
etwork Latency	<1µs	<1µs	
LANs Supported	4 k	4 k	
nk Aggregation Group Size	56	56	
otal Link Aggregation Groups	Up to number of ports	Up to number of ports	
acket Buffers	8 MB	8 MB	
emory	4GB DDR4	4GB DDR4	
ash	32 MB	32 MB	
ive	32G SSD	32G SSD	
panning Tree Instances	64	64	
oute Entries (IPv4/IPv6)	330k/112k	330k/112k	
ost Entries (IPv4/IPv6)	16k/5k	16k/5k	
mensions			
eight x Depth x Width (inches)	1.75 × 17.4 × 17.3	1.75 × 17.4 × 17.3	
eight x Depth x Width (mm)	44 × 442 × 440	44 × 442 × 440	
eight (kg)	7.149	7.834	
vironment			
ower Required	100-240V AC, 50/60 Hz	100-240V AC, 50/60 Hz	
ower Consumption (Maximum)	300W	2100W	
ower Supply	2× 350W	2× 1200W	
edundant Power	Dual hot swappable AC	Dual hot swappable AC	
eat Dissipation	590 BTU/h	1272 BTU/h	
perating Temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	
orage Temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	
umidity	5% to 95% RH non-condensing	5% to 95% RH non-condensing	
ir-Flow Direction	front-to-back	front-to-back	
oise Level	57.97 dBA	57.97 dBA	
ertification and Compliance			
	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	
/arranty			
	1 day to 1000 of the		

Fortinet Warranty

Limited II

Limited lifetime** warranty on all models

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



	FORTISWITCH T1024F-FPOE	
Hardware Specifications		
Total Network Interfaces	24×1G/2.5G/5G/10GBASE-T ports and 2×40GE / 100GE QSFP+ / QSFP28 ports	
Dedicated Management 10/100/1000 Ports	1	
RJ-45 Serial Console Port	1	
Form Factor	1 RU Rack Mount	
Power over Ethernet (PoE) Ports	24 (802.3 af/at/bt type 4)	
PoE Power Budget	1440 W	
Mean Time Between Failures	> 10 years	
System Specifications		
Switching Capacity (Duplex)	880 Gbps	
Packets Per Second (Duplex)	1309 Mpps	
MAC Address Storage	64 k	
Network Latency	<1µs	
VLANs Supported	4 k	
Link Aggregation Group Size	Up to 24	
Total Link Aggregation Groups	Up to number of ports	
Packet Buffers	8 MB	
Memory	8GB DDR4	
Flash	32 MB NOR	
Drive	8GB SSD	
ACL	3k	
Spanning Tree Instances	64	
Route Entries (IPv4/IPv6)	8 k/4 k	
Multicast route entries	8 k	
Host Entries (IPv4/IPv6)	16 k/6 k	
Dimensions		
Height x Depth x Width (inches)	1.73 × 16.14 × 17.32	
Height x Depth x Width (mm)	44 × 410 × 440	
Weight (kg)	16.53 lbs (7.5 kg)	
Environment		
Power Required	100–240V AC, 50/60 Hz	
Power Consumption (Maximum)	1660 W	
Power Supply	2× 1200 W	
Redundant Power	Dual hot swappable AC	
Heat Dissipation	5664 BTU/h	
Operating Temperature	32°F to 113°F (0°C to 45°C)	
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	
Humidity	10% to 95% RH non-condensing	
Air-Flow Direction	Front-to-back	
Noise Level	64.5 dBA	
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

Ordering Information

Product	SKU	Description
FortiSwitch Models		
FortiSwitch 424E-Fiber	FS-424E-Fiber	Layer 2/3 FortiGate switch controller compatible switch with 24x GE SFP and 4× 10 GE SFP+ Uplinks.
FortiSwitch M426E-FPOE	FS-M426E-FPOE	Layer 2/3 FortiGate switch controller compatible switch with 16x GE RJ45 PoE 802.3af/at, 8× 2.5 RJ45 PoE 802.3af/at/UPOE (60W), 2× 5 GE RJ45 and 4× 10 GE SFP+, with maximum 420 W PoE limit.
FortiSwitch 424E	FS-424E	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45, 4× 10 GE SFP+ ports.
FortiSwitch 424E-POE	FS-424E-POE	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45, 4× 10 GE SFP+ ports, 24 port PoE+ with maximum 283.5 W limit.
FortiSwitch 424E-FPOE	FS-424E-FPOE	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45, 4× 10 GE SFP + ports, 24 port PoE+ with maximum 433.7 W limit.
FortiSwitch 448E	FS-448E	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45, 4×10 GE SFP + ports.
FortiSwitch 448E-POE	FS-448E-POE	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45, 4×10 GE SFP + ports, 48 port PoE+ with maximum 421 W limit.
FortiSwitch 448E-FPOE	FS-448E-FPOE	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45, 4× 10 GE SFP + ports, 48 port PoE+ with maximum 772 W limit.
FortiSwitch 548D	FS-548D	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45, 4×10 GE SFP+ and 2×40 GE QSFP ports.
FortiSwitch 548D-FPOE	FS-548D-FPOE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45, 4× 10 GE SFP+ and 2× 40 GE QSFP+ ports, 48 port PoE with maximum 750 W limit.
FortiSwitch 624F	FS-624F	Layer 2/3 FortiGate switch controller compatible switch with 24× 5G RJ45 ports, 4× 25G SFP28 and MACSec.
FortiSwitch 624F-FPOE	FS-624F-FPOE	Layer 2/3 FortiGate switch controller compatible PoE 802.3bt switch with 24× 5G RJ45 ports, 4× 25G SFP28 and MACSec. Max 1400W POE output limit.
FortiSwitch 648F	FS-648F	Layer 2/3 FortiGate switch controller compatible switch with 32× 2.5G RJ45 + 16× 5G RJ45 ports, 8× 25G SFP28 and MACSec.
FortiSwitch 648F-FPOE	FS-648F-FPOE	Layer 2/3 FortiGate switch controller compatible PoE 802.3bt switch with 32× 2.5G RJ45 + 16× 5G RJ45 ports, 8× 25G SFP28 and MACSec. Max 1800W POE output limit.
FortiSwitch T1024F-FPOE	FS-T1024F-FPOE	Layer 2/3 FortiGate switch controller compatible PoE 802.3bt switch with 24× 10G/5G/2.5G/1G RJ45 and 2× 100GE QSFP28 ports. Max 1440W PoE output limit. Dual AC power supplies.
licenses		
FortiEdge Cloud Management License*	FC-10-FSW10-628-02-DD	FortiSwitch 200-400 Series (incl all FSW Rugged Models) FortiEdge Cloud Management SKU Including FortiCare Premium (Note, FortiCare only applicable when used with FortiEdge Cloud).
	FC-10-FSW20-628-02-DD	FortiSwitch 500-900 Series FortiEdge Cloud Management SKU Including FortiCare Premium (Note, FortiCare only applicable when used with FortiEdge Cloud).
	FC-10-FSW30-628-02-DD	FortiSwitch 1000 Series and above FortiEdge Cloud Management SKU Including FortiCare Premium (Note, FortiCare only applicable when used with FortiEdge Cloud).
FortiSwitch Manager Subscription License	FC1-10-SWMVM-258-01-DD	Subscription license for 10 FortiSwitch Units managed by FortiSwitchManager VM. 24×7 FortiCare support (for FSWM VM) included.
	FC2-10-SWMVM-258-01-DD	Subscription license for 100 FortiSwitch Units managed by FortiSwitchManager VM. 24×7 FortiCare support (for FSWM VM) included.
	FC3-10-SWMVM-258-01-DD	Subscription license for 1000 FortiSwitch Units managed by FortiSwitchManager VM. 24×7 FortiCare support (for FSWM VM) included.
FortiSwitch Advanced 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.
	FS-SW-LIC-600	SW License for FS-600 Series Switches to activate Advanced Features.
	FS-SW-LIC-1000	SW License for FS-1000 Series Switches to activate Advanced Features.
Accessories		
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-920	AC power supply for FS-548D-FPOE.**
FortiSwitch AC Power Supply	FS-600-PSU-1200	Spare AC power supply for FS-624F-FPOE and FS-648F-FPOE (power cord not included).
	FS-600-PSU-350	Spare AC power supply for FS-624F and FS-648F (power cord not included).

* When managing a FortiSwitch with a FortiGate via FortiGate Cloud, no additional license is necessary.

** Provides additional PoE capacity.

For details of Transceiver modules, see the Fortinet Transceivers datasheet.

Note that all PoE FortiSwitches are Alternative-A.

Visit https://www.fortinet.com/resources/ordering-guides for related ordering guides.

Fortinet Corporate Social Responsibility Policy

Fortinet is committed to driving progress and sustainability for all through cybersecurity, with respect for human rights and ethical business practices, making possible a digital world you can always trust. You represent and warrant to Fortinet that you will not use Fortinet's products and services to engage in, or support in any way, violations or abuses of human rights, including those involving illegal censorship, surveillance, detention, or excessive use of force. Users of Fortinet products are required to comply with the Fortinet EULA and report any suspected violations of the EULA via the procedures outlined in the Fortinet Whistleblower Policy.



F

www.fortinet.com

Copyright © 2024 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, FortiGate®, FortiGate®, FortiGate®, and FortiGate®, and certain other marks are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other received execution to the exerts a brinting written contract, signed by Fortinet SVP Legal and above, with a purchaser that expressly warrants that the identified product will perform according to certain expressly-identified performance metrics and, in such event, only the specific performance metrics expressly identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet's tests. Fortinet dicialians in ulary accevants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet's the indiguidation of the publication is all warrante.

October 17, 2024