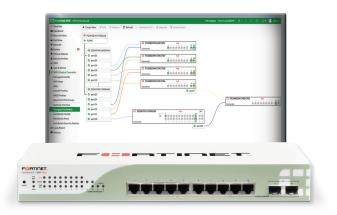
FERTINET

DATA SHEET

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, 148E, 148E-POE, 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

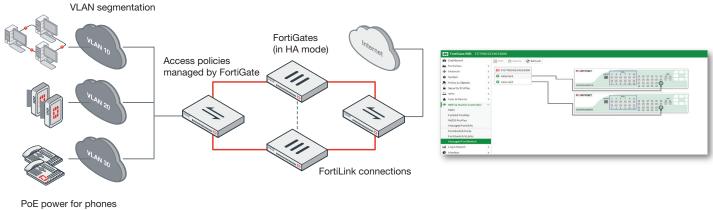
Highlights

- Secure Access switches suitable for wiringcloset and desktop installations
- Ideal for converged network environments; enabling voice, data and wireless traffic to be delivered across a single network
- Devices are identified and users authenticated prior to being granted access to the network
- Centralized security and access management from FortiGate interface
- Up to 48 ports in a compact 1 RU form factor
- Stackable up to 300 switches per FortiGate depending on model
- Supports Wire-speed switching and Store and Forward forwarding mode

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.

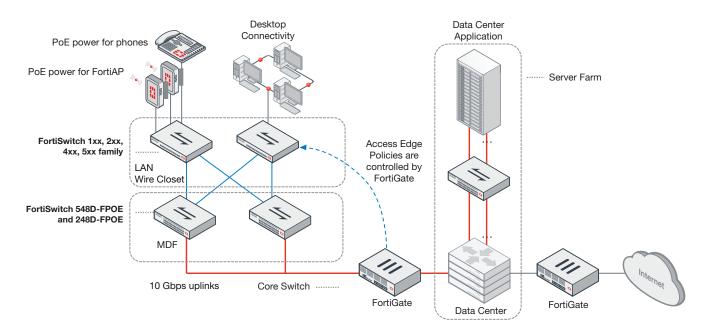


and APs

* 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 300 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)

Layer 2 Visis Yes Ves Junb 6 Frames Visis Yes Ves Auto-negolization for Pot Speed and Duplex Ves Yes Yes MUMDIX Auto-crossover Ves Yes Yes Yes IEEE 802.10 MAC Bridging/STP Ves Yes Yes Yes IEEE 802.10 Mapile Spanning Tree Protocol (MSTP) Ves Yes Yes Yes STP Root Guard Yes Yes Yes Yes Yes STP Potoc Guard Yes Yes Yes Yes Step Port Pat Yes Yes Yes Yes Unitask/Mutilesconset truthick gance over truthicking port (dst-ip, dst-imac, str-dst-ip, str-dst-imac, str-dst-ip, str-dst-imac, str-dst-ip, str-d		FORTISWITCH 2XXD, 4XXD, 5XXD SERIES	FORTISWITCH 2XXE SERIES	FORTISWITCH 1XXE SERIES
Auto-negotiation for Port Speed and Duplex Yes Yes Yes Yes MDVMDIX Auto-crossover Yes Yes Yes Yes IEEE 802.1 In MAG Bridging/STP Yes Yes Yes Yes IEEE 802.1 Regisf Spanning Tree Protocol (MSTP) Yes Yes Yes Yes IEEE 802.1 Is Multiple Spanning Tree Protocol (MSTP) Yes Yes Yes Yes STP BOD Guard Yes Yes Yes Yes Yes StP BPDU Guard Yes Yes Yes Yes Yes IEEE 802.1 Row LANT agging Yes Yes Yes Yes Yes IEEE 802.2 LO VLAN Tagging Yes Yes Yes Yes Yes Uncast/Multicate straffic balance over trunking port (dst-in, dst-mae, src-dst-ip, src-dst-mae, src-ip, src-mae) Yes Yes Yes Yes Uncast/Multicate straffic balance over trunking port (dst-in, dst-mae, src-dst-ip, src-dst-mae, src-ip, src-mae) Yes Yes Yes Yes IEEE 802.3 LOX LINA Aggregation Yes Yes Yes	Layer 2			
MD/MDIX Auto-crossover Yes Yes Yes IEEE 80.2.10 MAC Bridging/STP Yes Yes Yes IEEE 80.2.10 km2 birdging/STP Yes Yes Yes IEEE 80.2.10 km2 birdging/STP Yes Yes Yes IEEE 80.2.10 km2 birdging/STP Yes Yes Yes STP Root Guard Yes Yes Yes STP Brot Guard Yes Yes Yes Edge Port / Port Fast Yes Yes Yes EEE 80.2.10 kLnX Tagging Yes Yes Yes Private VLAN Yes Yes Yes Yes Private VLAN Yes Yes Yes Yes Unicast/Multicast traffic belance over trunking port (dst-ip, cds-mac, src-ip, src-max) Yes Yes Yes Unicast/Multicast traffic belance over trunking port (dst-ip, cds-mac, src-ip, src-dst-max) Yes Yes Yes EEE 802.2 Now Control and Back-presure Yes Yes Yes Yes EEE 802.3 UnoBase-T Yes Yes Yes Yes	Jumbo Frames	Yes	Yes	Yes
IEEE 802.1 D MAC Bridging/STP Yes Yes Yes IEEE 802.1 w Rapid Spanning Tree Protocol (MSTP) Yes Yes Yes IEEE 802.1 s Multiple Spanning Tree Protocol (MSTP) Yes Yes Yes STP Root Guard Yes Yes Yes Yes STP BPOL Guard Yes Yes Yes Yes Edge Port / Port Fast Yes Yes Yes Yes IEEE 802.10 VLAN Tagging Yes Yes Yes Yes Private VLAN Yes Yes Yes Yes Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-ip, src-mac) Yes Yes Yes Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-ip, src-mac) Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.3 u 100Base-TX Yes Yes Yes Yes IEEE 802.3 u 10DBase-TX Yes Yes Yes Yes IEEE 802.3 u 10DBase-SX/LX Yes Yes <t< th=""><td>Auto-negotiation for Port Speed and Duplex</td><td>Yes</td><td>Yes</td><td>Yes</td></t<>	Auto-negotiation for Port Speed and Duplex	Yes	Yes	Yes
IEEE 802.1 w Rapid Spanning Tree Protocol (MSTP) Yes Yes Yes IEEE 802.1 s Multiple Spanning Tree Protocol (MSTP) Yes Yes Yes STP Rot Guard Yes Yes Yes Yes STP BPDU Guard Yes Yes Yes Yes EEE 802.1 or VLAN Tagging Yes Yes Yes Yes IEEE 802.2 or VLAN Tagging Yes Yes Yes Yes Private VLAN Yes Yes Yes No IEEE 802.2 or VLAN Tagging Yes Yes Yes Yes Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mae, src-dst-ip, src-dst-mae, src-ip, src-ip, src-mae) Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 15/1 IEEE 802.2 X How Control and Back-pressure Yes Yes Yes Yes Yes IEEE 802.3 to IooBase-TX Yes Yes Yes Yes Yes IEEE 802.3 to IooBase-TX Yes Yes Yes Yes	MDI/MDIX Auto-crossover	Yes	Yes	Yes
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) Yes Yes STP Rot Guard Yes Yes Yes STP BPDU Guard Yes Yes Yes STP BPDU Guard Yes Yes Yes Edge Port / Port Fast Yes Yes Yes IEEE 802.10 VLAN Tagging Yes Yes No Private VLAN Yes Yes No IEEE 802.23 dLink Aggregation with LACP Yes Yes Yes Unicasi/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac) Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.10 KLak Aggregation Yes Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.3 V 100Base-TX Yes Yes Yes Yes IEEE 802.3 tu 100Base-TX Yes Yes Yes Yes IEEE 802.3 tu 100Base-TX Yes Yes Yes <td>IEEE 802.1D MAC Bridging/STP</td> <td>Yes</td> <td>Yes</td> <td>Yes</td>	IEEE 802.1D MAC Bridging/STP	Yes	Yes	Yes
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) Yes Yes STP Rot Guard Yes Yes Yes STP BPDU Guard Yes Yes Yes STP BPDU Guard Yes Yes Yes Edge Port / Port Fast Yes Yes Yes IEEE 802.10 VLAN Tagging Yes Yes No Private VLAN Yes Yes No IEEE 802.23 dLink Aggregation with LACP Yes Yes Yes Unicasi/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac) Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.10 KLak Aggregation Yes Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.3 V 100Base-TX Yes Yes Yes Yes IEEE 802.3 tu 100Base-TX Yes Yes Yes Yes IEEE 802.3 tu 100Base-TX Yes Yes Yes <td>IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)</td> <td>Yes</td> <td>Yes</td> <td>Yes</td>	IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)	Yes	Yes	Yes
STP BPDU Guard Yes Yes Yes Yes Edge Port / Port Fast Yes Yes Yes Yes IEEE 802.10 VLAN Tagging Yes Yes Yes Yes Private VLAN Yes Yes Yes No IEEE 802.3ad Link Aggregation with LACP Yes Yes Yes Yes Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac) Yes Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 15/1 IEEE 802.3a flow Control and Back-pressure Yes Yes Yes Yes IEEE 802.3u 100Base-TX Yes Yes Yes Yes IEEE 802.3u 100Base-SX/LX Yes Yes Yes Yes IEEE 802.3a 10 Guase-T Yes Yes Yes Yes IEEE 802.3a 10 Guase-T Yes Yes Yes Yes IEEE 802.3a 10 Guase-T Yes Yes Yes Yes IEEE 802.3a Co		Yes	Yes	Yes
Edge Port / Port Fast Yes Yes Yes IEEE 802.10 VLAN Tagging Yes Yes Yes Yes Private VLAN Yes Yes Yes No IEEE 802.3ad Link Aggregation with LACP Yes Yes Yes Yes Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac) Yes Yes Yes IEEE 802.1AX Link Aggregation Yes Yes Yes Yes IEEE 802.1AX Link Aggregation Yes Yes Yes Yes IEEE 802.1AX Link Aggregation Yes Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.3 rDew Control and Back-pressure Yes Yes Yes Yes IEEE 802.3 to 100Base-TX Yes Yes Yes Yes Yes IEEE 802.3 to 100Base-SXLX Yes Yes Yes Yes Yes IEEE 802.3 to 100Base-T Yes Yes Yes Yes Yes	STP Root Guard	Yes	Yes	Yes
IEEE 802.1Q VLAN Tagging Yes Yes Yes Private VLAN Yes Yes No IEEE 802.3ad Link Aggregation with LACP Yes Yes Yes Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-ip, src-mac) Yes Yes Yes IEEE 802.1AX Link Aggregation Yes Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes Yes IEEE 802.3 u100Base-T Yes Yes Yes Yes IEEE 802.3u 100Base-TX Yes Yes Yes Yes IEEE 802.3u 100Base-TX Yes Yes Yes Yes IEEE 802.3u 100Base-TX Yes Yes Yes Yes IEEE 802.3as 100Base-T Yes Yes Yes Yes IEEE 802.3as 100Base-T Yes Yes Yes Yes IEEE 802.3as 10 Gigabit Ethernet 4xx and 5xx Family N/A N/A <tr< th=""><td>STP BPDU Guard</td><td>Yes</td><td>Yes</td><td>Yes</td></tr<>	STP BPDU Guard	Yes	Yes	Yes
Private VLAN Yes Yes No IEEE 802.3ad Link Aggregation with LACP Yes Yes Yes Yes Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-igh, src-mac) Yes Yes Yes IEEE 802.1AX Link Aggregation Yes Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes Yes IEEE 802.3u 100Base-T Yes Yes Yes Yes Yes IEEE 802.3u 100Base-TX Yes Yes Yes Yes Yes IEEE 802.3u 100Base-TX Yes Yes Yes Yes Yes IEEE 802.3a 100Base-TA Yes Yes Yes Yes Yes Yes IEEE 802.3a 2 S0MA/CD Access Method and Physical Layer Specifications Yes Yes Yes Yes IEEE 802.3a CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Yes Storm Control Yes <td>Edge Port / Port Fast</td> <td>Yes</td> <td>Yes</td> <td>Yes</td>	Edge Port / Port Fast	Yes	Yes	Yes
IEEE 802.3ad Link Aggregation with LACP Yes Yes Yes Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac) Yes Yes Yes IEEE 802.1AX Link Aggregation Yes Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes IEEE 802.3x 100Base-T Yes Yes Yes Yes IEEE 802.3ab 1000Base-TX Yes Yes Yes Yes IEEE 802.3ab 1000Base-T Yes Yes Yes Yes IEEE 802.3ab 1000Base-T Yes Yes Yes Yes IEEE 802.3 cSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes IEEE 802.3 cSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Mac, IP, Ethertype-based VLANs	IEEE 802.1Q VLAN Tagging	Yes	Yes	Yes
Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac) Yes Yes Yes IEEE 802.1AX Link Aggregation Yes Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 15/1 IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes Yes IEEE 802.3 toBase-T Yes Yes Yes Yes IEEE 802.3x 100Base-TX Yes Yes Yes Yes IEEE 802.3x 100Base-TX Yes Yes Yes Yes IEEE 802.3x 1000Base-SX/LX Yes Yes Yes Yes IEEE 802.3ab 1000Base-T Yes Yes Yes Yes IEEE 802.3ab 1000Base-T Yes Yes Yes Yes IEEE 802.3c StoMA/CD Access Method and Physical Layer Specifications Yes Yes Yes IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, E	Private VLAN	Yes	Yes	No
IEEE 802.1AX Link Aggregation Yes Yes Yes Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes IEEE 802.3x 100Base-T Yes Yes Yes IEEE 802.3u 100Base-TX Yes Yes Yes IEEE 802.3z 1000Base-SX/LX Yes Yes Yes IEEE 802.3a 100Base-T Yes Yes Yes IEEE 802.3a 100Base-TX Yes Yes Yes IEEE 802.3a 1000Base-T Yes Yes Yes IEEE 802.3a 100Base-T Yes Yes Yes IEEE 802.3a 100Base-T Yes Yes Yes IEEE 802.3a 2 NotoBase-T Yes Yes Yes IEEE 802.3a CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes No		Yes	Yes	Yes
Spanning Tree Instances (MSTP/CST) 15/1 15/1 15/1 IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes IEEE 802.31 10Base-T Yes Yes Yes IEEE 802.32 100Base-TX Yes Yes Yes IEEE 802.32 100Base-TX Yes Yes Yes IEEE 802.3a 1000Base-TX Yes Yes Yes IEEE 802.3a 1000Base-T Yes Yes Yes IEEE 802.3a 1000Base-T Yes Yes Yes IEEE 802.3a 1000Base-T Yes Yes Yes IEEE 802.3a 2 10 Gigabit Ethernet 4xx and 5xx Family N/A N/A IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) </th <td>Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac)</td> <td>Yes</td> <td>Yes</td> <td>Yes</td>	Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac)	Yes	Yes	Yes
IEEE 802.3x Flow Control and Back-pressure Yes Yes Yes IEEE 802.3x 100Base-T Yes Yes Yes IEEE 802.3u 100Base-TX Yes Yes Yes IEEE 802.3x 1000Base-SX/LX Yes Yes Yes IEEE 802.3a 1000Base-SX/LX Yes Yes Yes IEEE 802.3x 1000Base-TX Yes Yes Yes IEEE 802.3a 1000Base-SX/LX Yes Yes Yes IEEE 802.3a 1000Base-TX Yes Yes Yes IEEE 802.3a 1000Base-TX Yes Yes Yes IEEE 802.3a 1000Base-TX Yes Yes Yes IEEE 802.3a 100Base-TX Yes Yes Yes IEEE 802.3a CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A <	IEEE 802.1AX Link Aggregation	Yes	Yes	Yes
IEEE 802.3 10Base-T Yes Yes Yes IEEE 802.3 100Base-TX Yes Yes Yes IEEE 802.3 2 1000Base-SX/LX Yes Yes Yes IEEE 802.3 ab 1000Base-T Yes Yes Yes IEEE 802.3 ac 10 Gigabit Ethernet 4xx and 5xx Family N/A N/A IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A	Spanning Tree Instances (MSTP/CST)	15/1	15/1	15/1
IEEE 802.3u 100Base-TX Yes Yes Yes Yes IEEE 802.3z 1000Base-SX/LX Yes Yes Yes Yes IEEE 802.3a 1000Base-T Yes Yes Yes Yes IEEE 802.3a 1000Base-T Yes Yes Yes Yes IEEE 802.3a 10 Gigabit Ethernet 4xx and 5xx Family N/A N/A IEEE 802.3 cSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A	IEEE 802.3x Flow Control and Back-pressure	Yes	Yes	Yes
IEEE 802.3z 1000Base-SX/LX Yes Yes Yes Yes IEEE 802.3ab 1000Base-T Yes Yes Yes Yes IEEE 802.3ab 1000Base-T 4xx and 5xx Family N/A N/A IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A		Yes	Yes	Yes
IEEE 802.3z 1000Base-SX/LX Yes Yes Yes Yes IEEE 802.3ab 1000Base-T Yes Yes Yes Yes IEEE 802.3ab 1000Base-T 4xx and 5xx Family N/A N/A IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A	IEEE 802.3u 100Base-TX	Yes	Yes	Yes
IEEE 802.3ae 10 Gigabit Ethernet 4xx and 5xx Family N/A N/A IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A		Yes	Yes	Yes
IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications Yes Yes Yes Storm Control Yes Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A	IEEE 802.3ab 1000Base-T	Yes	Yes	Yes
Storm Control Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A		4xx and 5xx Family	N/A	N/A
Storm Control Yes Yes Yes MAC, IP, Ethertype-based VLANs Yes Yes Yes Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A	IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications	Yes	Yes	Yes
Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A		Yes	Yes	Yes
Virtual-Wire Yes Yes No Split Port (QSFP+ breakout to 4xSFP+) FS-5xx Family N/A N/A	MAC, IP, Ethertype-based VLANs	Yes	Yes	Yes
· · · · · · · · · · · · · · · · · · ·		Yes	Yes	No
Time-Domain Reflectcometry (TDR) Support Yes No	Split Port (QSFP+ breakout to 4xSFP+)	FS-5xx Family	N/A	N/A
	Time-Domain Reflectcometry (TDR) Support	Yes	Yes	No



Features

		FORTISWITCH	FORTISWITCH
aver 3*	2XXD, 4XXD, 5XXD SERIES	2XXE SERIES	1XXE SERIES
Static Routing (Hardware-based)	Yes	Yes	N/A
Routing Entries	64 on FS-2xx, 4xx Family; 16K on FS-5xx Family	64	N/A
lost Entries	4K on FS-2xx, 4xx Family; 24K on FS-5xx Family	4K	N/A
Dynamic Routing Protocols**	OSPFv2, RIPv2, VRRP;	OSPFv2, RIPv2, VRRP	
Synamic Houting (1000005	BGP, ISIS on FS-5xx	001172,11172,7111	IWA
Multicast Protocols	PIM-SSM on FS-5xx	N/A	N/A
ECMP	FS-5xx Family	No	N/A
Bidirectional Forwarding Detection (BFD)	Yes	Yes	N/A
DHCP Relay	Yes	Yes	N/A
Services	163	105	IWA
GMP Snooping	Yes	Yes	No
	ies	162	INU
Security and Visibility	Vez	V	\/
Port Mirroring	Yes	Yes	Yes
Admin Authentication Via RFC 2865 RADIUS	Yes	Yes	Yes
IEEE 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
sFlow	Yes	Yes	No
ACL	1K entries on FS-5xx Family; 512 on FS-1xx, 2xx, 4xx Families	512 Entries	No
EEE 802.1ab Link Layer Discovery Protocol (LLDP)	Yes	Yes	Yes
EEE 802.1ab LLDP-MED	Yes	Yes	Yes
DHCP-Snooping	Yes	Yes	Yes
Dynamic ARP Inspection	Yes	Yes	No
Sticky MAC and MAC Limit	Yes (2xx, 4xx and 5xx)	Yes	Yes
ligh Availability	103 (ZAA, 4AA dilu 3AA)	103	100
	Ver (Our Are and Eur)	Vez	N1/A
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
Nanagement			
Pv4 and IPv6 Management	Yes	Yes	Yes
Telnet / SSH	Yes	Yes	Yes
HTTP / HTTPS	Yes	Yes	Yes
SNMP v1/v2c/v3	Yes	Yes	Yes
SNTP	Yes	Yes	Yes
Standard CLI and Web GUI Interface	Yes	Yes	Yes
Software download/upload: TFTP/FTP/GUI	Yes	Yes	Yes
Vanaged from FortiGate	Yes	Yes	Yes
Support for HTTP REST APIs for Configuration and Monitoring	Yes	Yes	Yes
Additional RFC and MIB Support			
RFC 2571 Architecture for Describing SNMP	Yes	Yes	Yes
DHCP Client	Yes	Yes	Yes
IFC 854 Telnet Server	Yes	Yes	Yes
IFC 2865 RADIUS	Yes	Yes	Yes
IFC 1643 Ethernet-like Interface MIB	Yes	Yes	Yes
FC 1213 MIB-II	Yes	Yes	Yes
RC 1354 IP Forwarding Table MIB	Yes	Yes	Yes
FC 2572 SNMP Message Processing and Dispatching	Yes	Yes	Yes
FC 1573 SNMP MIB II	Yes	Yes	Yes
			Yes
RFC 1157 SNMPv1/v2c	Yes	Yes	163

Features

FORTISWITCH 108E	FORTISWITCH 108E-POE	FORTISWITCH 108E-FP0E
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
0	0	0
1	1	1
Desktop	1 RU Rack Mount	1 RU Rack Mount
0	4 (802.3af/at)	8 (802.3af/at)
0	65 W	130 W
> 10 years	> 10 years	> 10 years
20 Gbps	20 Gbps	20 Gbps
30 Mpps	30 Mpps	30 Mpps
8 K	8 K	8 K
	4µs	4µs
4 K	4 K	4 K
8	8	8
8	8	8
512 KB	512 KB	512 KB
256 MB DDR3	256 MB DDR3	256 MB DDR3
32 MB	32 MB	32 MB
1.5 x 6.3 x 8.7	1.7 x 8.2 x 13	1.7 x 8.2 x 13
38 x 160 x 220	44 x 209 x 330	44 x 209 x 330
2.2 lbs (1 kg)	4.3 lbs (1.95 kg)	4.5 lbs (2.04 kg)
100–240V AC, 50–60 Hz / PoE-PSE(af)	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
AC & PoE-PD Built in	AC Built in	AC Built in
—	—	—
5.54 W / 6.26 W	70.19 W / 71.10 W	135.19 W / 136.10 W
18.9 BTU/h	17.7 BTU/h	17.7 BTU/h
0-113°F (0–45°C)	0-113°F (0–45°C)	0-113°F (0-45°C)
	-40-158°F (-40-70°C)	-40–158°F (-40–70°C)
10–90% non-condensing	10–90% non-condensing	10–90% non-condensing
	7x GE RJ45, 1x GE/POE-PD RJ45 and 2x GE SFP 0 1 Desktop 0 20 Gbps 30 Mpps 8 K 4 K 8 512 KB 256 MB DDR3 32 MB 1.5 x 6.3 x 8.7 38 x 160 x 220 2.2 lbs (1 kg) 100-240V AC, 50-60 Hz / PoE-PSE(af) AC & PoE-PD Built in	7x GE RJ45, 1x GE/POE-PD RJ45 and 2x GE SFP 8x GE RJ45 and 2x GE SFP 0 0 1 1 Desktop 1 RU Rack Mount 0 4 (802.3at/at) 0 65 W > 10 years > 10 years 20 Gbps 20 Gbps 30 Mpps 30 Mpps 8 K 8 K 4µs 4µs 4 K 4 K 8 8 512 KB 512 KB 256 MB DDR3 256 MB DDR3 32 MB 32 MB 1.5 x 6.3 x 8.7 1.7 x 8.2 x 13 38 x 160 x 220 44 x 209 x 330 2.2 lbs (1 kg) 4.3 lbs (1.95 kg) 100-240V AC, 50-60 Hz / PoE-PSE(at) 100-240V AC, 50-60 Hz AC & PoE-PD Built in AC Built in

Warranty

Fortinet Warranty

Limited lifetime* warranty on all models

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



	FORTISWITCH 124E	FORTISWITCH 124E-POE	FORTISWITCH 124E-FPOE
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 (Duplex)	56 Gbps	56 Gbps	56 Gbps
Packets Per Second (Duplex)	83 Mpps	83 Mpps	83 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	202.78 W / 205.45 W	387.78 W / 390.45 W
Heat Dissipation	54 BTU/h	60.67 BTU/h	60.67 BTU/h
Operating Temperature	0-113°F (0-45°C)	0-113°F (0-45°C)	0-113°F (0-45°C)
Storage Temperature	-40–158°F (-40–70°C)	-40—158°F (-40—70°C)	-40—158°F (-40—70°C)
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

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



Limited lifetime* warranty on all models

FortiSwitch 124E

FortiSwitch 124E-POE

FortiSwitch 124E-FPOE

	FORTISWITCH 148E	FORTISWITCH 148E-POE
Hardware Specifications		
Total Network Interfaces	48x GE RJ45 and 4x GE SFP	48x GE RJ45 and 4x GE SFP
Dedicated Management 10/100 Port	0	0
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	0	24 (802.3af/at)
PoE Power Budget	0	370 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity (Duplex)	104 Gbps	104 Gbps
Packets Per Second (Duplex)	155 Mpps	155 Mpps
MAC Address Storage	16 K	16 K
Network Latency	3860 ns	3860 ns
VLANs Supported	4 K	4 K
Link Aggregation Group Size	8	8
Total Link Aggregation Groups	16	16
Packet Buffers	1.5 MB	1.5 MB
DRAM	256 MB DDR3	256 MB DDR3
FLASH	64 MB	64 MB
Dimensions		
Height x Depth x Width (inches)	1.73 x 12.2 x 17.3	1.73 x 13.7 x 17.3
Height x Depth x Width (mm)	44 x 309 x 440	44 x 348 x 440
Weight	8.6 lbs (3.9 kg)	11.5 lbs (5.2 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	No	No
Power Consumption (Average / Maximum)	19.804 W / 22.137 W	328.782 W / 393.109 W
Heat Dissipation	67.574 BTU/h	78.82 BTU/h
Operating Temperature	0-113°F (0–45°C)	0-113°F (0-45°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		

Warranty

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

Fortinet Warranty

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FortiSwitch 148E



FortiSwitch 148E-FPOE

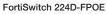
	FORTISWITCH 224D-FPOE	FORTISWITCH 224E	FORTISWITCH 224E-POE
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 ports and 4x GE SFP ports	24x GE RJ45 ports and 4x GE SFP ports	24x GE RJ45 ports and 4x GE SFP ports
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form 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 (Duplex)	56 Gbps	56 Gbps	56 Gbps
Packets Per Second (Duplex)	83 Mpps	83 Mpps	83 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	Up to number of ports	Up to number of ports	Up to number of ports
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
Weight	10.64 lbs (4.83 kg)	4.78 lbs (2.17 kg)	5.37 lbs (2.44 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	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)
Humidity	10–90% non-condensing	10–90% non-condensing	10–90% non-condensing
Certification and Compliance			
		FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	
Manage			

Warranty

Fortinet Warranty

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FortiSwitch 224E



FortiSwitch 224E-POE

	FORTISWITCH 248D	FORTISWITCH 248E-POE	FORTISWITCH 248E-FPOE
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
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
Nean Time Between Failures	> 10 years	> 10 years	> 10 years
ystem Specifications			
witching Capacity (Duplex)	104 Gbps	104 Gbps	104 Gbps
ackets Per Second (Duplex)	155 Mpps	155 Mpps	155 Mpps
/IAC 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
otal Link Aggregation Groups	Up to number of ports	Up to number of ports	Up to number of ports
Packet Buffers	1.5 MB	1.5 MB	1.5 MB
DRAM	512 MB	512 MB	512 MB
LASH	128 MB	128 MB	128 MB
limensions			
leight 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
leight x Depth x Width (mm)	44 x 246 x 440	44 x 410 x 440	44 x 410 x 440
Veight	7.81 lbs (3.54 kg)	12.12 lbs (5.5 kg)	13.44 lbs (6.1 kg)
nvironment			
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
ower Supply	AC built in	AC built in	AC built in
Redundant Power	—	Optional FRPS-740	Optional FRPS-740
ower Consumption (Average / Maximum)	38.66 W / 39.19 W	457.46 W / 466.47 W	842 W / 855.02 W
leat Dissipation	134 BTU/h	177.14268 BTU/h	162.87865 BTU/h
)perating 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

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FortiSwitch 248D

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FortiSwitch 248E-FPOE



	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 (Duplex)	88 Gbps	88 Gbps	88 Gbps
Packets Per Second (Duplex)	131 Mpps	131 Mpps	131 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	Up to number of ports	Up to number of ports	Up to number of ports
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

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FortiSwitch 424D



FURTIDET	

FortiSwitch 424D-FPOE

	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 (Duplex)	176 Gbps	176 Gbps	176 Gbps
Packets Per Second (Duplex)	262 Mpps	262 Mpps	262 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	Up to number of ports	Up to number of ports	Up to number of ports
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, RC	CM, VCCI, BSMI, UL, CB, RoHS2	

Warranty

Fortinet Warranty

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FortiSwitch 448D-POE



FortiSwitch 448D-FPOE

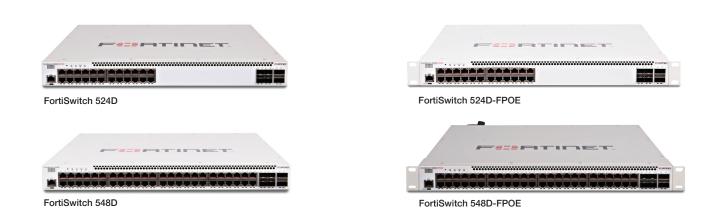


	FORTISWITCH 524D	FORTISWITCH 524D-FPOE	FORTISWITCH 548D	FORTISWITCH 548D-FPOE
Hardware Specifications				
Total Network Interfaces	24 GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP	24 GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports 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 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 (Duplex)	288 Gbps	288 Gbps	336 Gbps	336 Gbps
Packets Per Second (Duplex)	428 Mpps	428 Mpps	512 Mpps	512 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	Up to number of ports	Up to number of ports	Up to number of ports	Up to number of ports
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, BSI	VII, UL, CB, RoHS2	

Warranty

Fortinet Warranty Limited lifetime* warranty on all models

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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-POE	FS-108E-POE	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-FPOE	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-POE	FS-124E-POE	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-FPOE	Layer 2 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 148E	FS-148E	Layer 2 FortiGate switch controller compatible switch with 48 GE RJ45 + 4 SFP ports.
FortiSwitch 148E-POE	FS-148E-POE	Layer 2 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 224D-FPOE	FS-224D-FPOE	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. Fanless.
FortiSwitch 224E-POE	FS-224E-POE	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-POE	FS-248E-POE	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-FPOE	FS-248E-FPOE	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-POE	FS-424D-POE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 2x 10 GE SFP+ ports, 24 port PoE with maximum 185 W limit.
FortiSwitch 424D-FP0E	FS-424D-FPOE	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-POE	FS-448D-POE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4x 10 GE SFP+ ports, 48 port PoE with maximim 370 W limit.
FortiSwitch 448D-FPOE	FS-448D-FPOE	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-FPOE	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-FPOE	FS-548D-FPOE	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.
FortiSwitch Cloud Management License*	FC-10-WMSC1-190-02-DD	FortiSwitch Cloud Management License subscription 1 Year Contract.
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-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.**

* 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.



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