

FortiSwitch ${ }^{T M}$ D-Series
Secure Access Switches


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FortiSwitch Secure Access switches deliver outstanding security, performance and manageability for threat conscious small to mid-sized businesses, distributed enterprises and branch offices.

## 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.
- Power over Ethernet capable, including PoE+.
- Ideal for converged network environments; enabling voice, data and wireless traffic to be delivered across a single network.

FortiCare Worldwide $24 \times 7$ Support
support.fortinet.com

FortiGuard Security Services
www.fortiguard.com

## DEPLOYMENT OPTIONS

## 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.


## Key Features \& Benefits

Single Management Framework
Single Policy Provisioning

## Centralized Authentication

Role-Based Ports

Reduces complexity and decreases management cost with network security functions managed through a single console.
The same security policy can apply to a user or device regardless of how or where they connect to the network.Enables access to certain network ports based on the role of a user within the organization, such as in shared conference rooms or engineering facilities.
All users are authenticated against the same user database, regardless of whether they connect to the wired or wireless network, including temporary guest users.

Enables access to certain network ports based on the role of a user within the organization, such as in shared conference rooms or engineering facilities.

## CAPABILITIES: FORTILINK MODE VS. STANDALONE MODE



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## SOFTWARE FEATURES (STANDALONE MODE)

|  | FORTISWITCH D-SERIES |
| :---: | :---: |
| Layer 2 |  |
| Jumbo Frames | Yes |
| Auto-negotiation for port speed and duplex | Yes |
| IEEE 802.1D MAC Bridging/STP (will interoperate) | Yes |
| IEEE 802.1w Rapid Spanning Tree Protocol (RSTP, will interoperate) | Yes |
| IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) | Yes |
| IEEE 802.1p Mapping to Priority Queue | Not supported |
| Edge Port/Port Fast | Yes |
| IEEE 802.10 VLAN Tagging | Yes |
| Private VLAN | Not supported on 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 (MAC only) |
| 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 802.32 1000Base-SXILX | Yes |
| IEEE 802.3ab 1000Base-T | Yes |
| 802.3ae 10 Gigabit Ethernet | in FS-5xx, 4xx family |
| 802.3 CSMACD Access Method and Physical Layer Specifications | Yes |
| IEEE 802.3af-2003/2009 POE | Not supported on FS-124D |
| Storm Control | Yes (except FS-108D-POE, FS-224D-POE) |
| Layer 3 |  |
| Static Routing (Software-based only) | Up to 64 staic routes, usable for software routing (ike management trafic) |
| Static Routing (Hardware-based) | 64 staic routes (16K on FS-5xx family* |
| L3 Host/ARP Entries | 4K on FS-1xx, 2xx, 4xx family* 24K on FS-5xx family |
| Services |  |
| IGMP Snooping (v1/v2/v3) | 1023 groups on FS-1xx, 2xx, 4xx, 5xx. Not supported on FS-108D-POE, FS-224D-POE |
| Security |  |
| Port Mirroring | Yes |
| Admin Authentication Via RFC 2865 RADIUS | Yes |
| 802.1x authentication with port-based assignment | Yes |
| sFlow | Yes, All modeds except FS-108D-POE, FS-224D-POE |
| ACL Tables | 1 K entries on FS-5xx family 512 on FS-1xx, 2xx, 4xx, 5xx families Not supported on FS-108D-POE, FS-224D-POE |
| Management |  |
| Telnet / SSH | Yes |
| HTTP / HTTPS | Yes |
| SNMP v1/v2c/v3 | Yes |
| SNTP | Yes |
| LLDP (802.1ab, Link Layer Discovery Protocol) (receive and transmit) | Yes |
| Standard CLI and web GUl interface | Yes |
| Software download/upload: TFTP/FTP/GUI | Yes |
| Managed from Fortigate | Yes |
| 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 |

[^1]
## SOFTWARE FEATURES (STANDALONE MODE)

|  | FORTISWITCH D-SERIES |
| :---: | :---: |
| RFC and MIB Support** |  |
| 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 |

${ }^{* *}$ MIBs have been tested with Solarwinds NPM tool.

## 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 10/100/1000 Ports | 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 (802.3at/802.3at) |
| PoE Power Budget | 75 W | 0 | 100 W |
| Mean Time Between Failures | $>10$ years | > 10 years | > 10 years |
| System Specifications |  |  |  |
| Switch Type | Web and CLI Managed | Web and CLI Managed | Web and CLI Managed |
| Switching Capacity | 20 Gbps | 52 Gbps | 52 Gbps |
| Packets Per Second | 40 Mpps | 77 Mpps | 77 Mpps |
| MAC Address Storage | 16K | 8 K | 16K |
| Network Latency | <2 $\mu \mathrm{s}$ | <1 ${ }^{\text {s }}$ | <1 ${ }^{\text {s }}$ |
| VLANs Supported | 4K | 4K | 4K |
| Link Aggregation Group Size | 8 | 12 | 12 |
| Total Link Aggregation Groups | 4 | 12 | 12 |
| 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 Width x Length (inches) | $1.7 \times 13 \times 7.9$ | $1.7 \times 17.3 \times 5.5$ | $1.7 \times 13 \times 9$ |
| Height x Width x Length (mm) | $44 \times 330 \times 200$ | $44 \times 440 \times 140$ | $44 \times 330 \times 230$ |
| Weight | $4.19 \mathrm{lbs}(1.9 \mathrm{~kg})$ | $3.74 \mathrm{lbs}(1.7 \mathrm{~kg})$ | $5.4 \mathrm{lbs}(2.4 \mathrm{~kg})$ |
| Environment |  |  |  |
| Power Required | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ |
| 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 | 14W/19 W | 19W/131 W |
| Heat Dissipation | 324.32 BTU/h | 64.81 BTU/h | 77 BTU/h |
| Operating Temperature | $32-113^{\circ} \mathrm{F}\left(0-45^{\circ} \mathrm{C}\right)$ | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ |
| Storage Temperature | $-13-158^{\circ} \mathrm{F}\left(-25-70^{\circ} \mathrm{C}\right)$ | $-4-158^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ | $-4-158^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ |
| 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 | FORTISWITCH 248D-POE | FORTISWITCH 248D-FPOE |
| :---: | :---: | :---: | :---: | :---: |
| Hardware Specifications |  |  |  |  |
| Total Network Interfaces | 20x GE RJ45 ports and 4x GE RJ45/SFP combo ports | 24x GE RJJ45 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 10/100/1000 Ports | 0 | 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 | 12 (802.3af) | 24 (802.3af/802.3at) | 24 (802.3af) | 48 (802.3af/802.3at) |
| PoE Power Budget | 180 W (802.11af) | 370 W | 370 W | 370 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 | 48 Gbps | 56 Gbps | 104 Gbps | 104 Gbps |
| Packets Per Second | 71 Mpps | 83 Mpps | 155 Mpps | 155 Mpps |
| MAC Address Storage | 16K | 16K | 16K | 16K |
| Network Latency | <2 $\mu \mathrm{s}$ | <1 1 s | <1 ${ }^{\text {s }}$ | <1 ${ }^{\text {s }}$ |
| VLANs Supported | 4K | 4K | 4K | 4K |
| Link Aggregation Group Size | 8 | 12 | 12 | 12 |
| Total Link Aggregation Groups | 12 | 14 | 26 | 26 |
| Packet Buffers | 1 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 Width x Length (inches) | $1.7 \times 17.3 \times 10.1$ | $1.7 \times 12.2 \times 17.3$ | $1.7 \times 17.3 \times 16.9$ | $1.7 \times 17.3 \times 16.1$ |
| Height x Width x Length (mm) | $44 \times 440 \times 257$ | $44 \times 310 \times 440$ | $44 \times 440 \times 429$ | $44 \times 440 \times 410$ |
| Weight | $8.49 \mathrm{lbs}(3.85 \mathrm{~kg})$ | $10.64 \mathrm{lbs}(4.83 \mathrm{~kg})$ | $13.67 \mathrm{lbs}(6.20 \mathrm{~kg})$ | $15.4 \mathrm{lbs}(7.01 \mathrm{~kg})$ |
| Environment |  |  |  |  |
| Power Required | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240VAC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ |
| Power Supply | AC built in | AC built in | AC built in | AC built in |
| Redundant Power | - | Optional FRPS-740 | - | Optional FRPS-740 |
| Power Consumption (Average / Maximum) | $190 \mathrm{~W} / 225 \mathrm{~W}$ | 380 W / 397 W | $476 \mathrm{~W} / 476 \mathrm{~W}$ | $410 \mathrm{~W} / 411 \mathrm{~W}$ |
| Heat Dissipation | 255 BTU/h | 85 BTU/h | $180 \mathrm{BTU} / \mathrm{h}$ | 188 BTU/h |
| Operating Temperature | $32-104^{\circ} \mathrm{F}\left(0-40^{\circ} \mathrm{C}\right)$ | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ |
| Storage Temperature | $-4-158^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ | -4-158 ${ }^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ | $-4-158^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ | $-4-158^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ |
| Humidity | 10-90\% non-condensing | 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 224D-POE



FortiSwitch 248D-POE


FortiSwitch 224D-FPOE

## SPECIFICATIONS

|  | FORTISWITCH 424D | FORTISWITCH 424D-POE | FORTISWITCH 424D-FPOE |
| :---: | :---: | :---: | :---: |
| Hardware Specifications |  |  |  |
| Total Network Interfaces | $24 \times$ GE RJ45 and $2 \times 10$ GE SFP+ ports <br> Note: SFP+ ports are compatble with 1 GE SFP | $24 \times$ GE RJ45 and $2 \times 10$ GE SFP+ ports <br> Note: SFP+ ports are compatble with 1 GE SFP | 24x GE RJ45 and $2 \times 10$ GE SFP+ ports Note: SFP+ ports are compatble with 1 GE SFP |
| Dedicated Management 10/100/1000 Ports | 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 (802.3at/at) | 24 (802.3at/at) |
| PoE Power Budget | N/A | 185 W | 370 W |
| Mean Time Between Failures | > 10 years | >10 years | > 10 years |
| System Specifications |  |  |  |
| Switch Type | Web and CLI Managed | Web and CLI Managed | Web and CLI Managed |
| 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 | <1 ${ }^{\text {s }}$ | <1 ${ }^{\text {s }}$ | <1 ${ }^{\text {s }}$ |
| VLANs Supported | 4K | 4K | 4K |
| Link Aggregation Group Size | 12 | 12 | 12 |
| 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 Width x Length (inches) | $1.7 \times 17.3 \times 12.2$ | $1.7 \times 17.3 \times 12.2$ | $1.7 \times 17.3 \times 12.2$ |
| Height x Width x Length (mm) | $44 \times 440 \times 310$ | $44 \times 440 \times 310$ | $44 \times 440 \times 310$ |
| Weight | $7.14 \mathrm{lbs}(3.24 \mathrm{~kg})$ | $8.42 \mathrm{lbs}(3.82 \mathrm{~kg})$ | $10.64 \mathrm{lbs}(4.83 \mathrm{~kg})$ |
| Environment |  |  |  |
| Power Required | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ |
| 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) | 17.3W/17.2 W | 208 W/210W | 397 W/403 W |
| Heat Dissipation | 69 BTU/h | 89 BTU/h | 100 BTU/h |
| Operating Temperature | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ |
| Storage Temperature | $-4-158^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ | ${ }^{-4-158}{ }^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ | $-4-158^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ |
| 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 $4 \times 10$ GE SFP+ ports Note: SFP+ ports are compatble with 1 GE SFP | 48x GE RJ45 and $4 \times 10$ GE SFP+ ports Note: SFP+ ports are compatble with 1 GE SFP | 48x GE RJ45 and $4 \times 10$ GE SFP+ ports Note: SFP+ ports are compatble with 1 GE SFP |
| Dedicated Management 10/100/1000 Ports | 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 (802.3at/at) | 48 (802.3at/at) |
| PoE Power Budget | N/A | 185 W | 370 W |
| Mean Time Between Failures | $>10$ years | $>10$ years | $>10$ years |
| System Specifications |  |  |  |
| Switch Type | Web and CLI Managed | Web and CLI Managed | Web and CLI Managed |
| Switching Capacity | 176 Gbps | 176 Gbps | 176 Gbps |
| Packets Per Second | 262 Mpps | 262 Mpps | 262 Mpps |
| MAC Address Storage | 16K | ----16 | 16K |
| Network Latency | <1 1 s | <1 1 s | <1 1 s |
| VLANs Supported | 4K | 4 K | 4K |
| Link Aggregation Group Size | 12 | 12 | 12 |
| 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 Width x Length (inches) | $1.7 \times 17.3 \times 12.2$ | $1.7 \times 17.3 \times 12.2$ | $1.7 \times 17.3 \times 12.2$ |
| Height x Width $\times$ Length (mm) | $44 \times 440 \times 310$ | $44 \times 440 \times 310$ | $44 \times 440 \times 310$ |
| Weight | $9.15 \mathrm{lbs}(4.15 \mathrm{~kg})$ | $13.44 \mathrm{lbs}(6.1 \mathrm{~kg}$ ) | $15.45 \mathrm{lbs}(7.01 \mathrm{~kg})$ |
| Environment |  |  |  |
| Power Required | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ |
| 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) | 17.3W/17.2W | 208W/210W | 397 W/403W |
| Heat Dissipation | 69 BTU/h | 89 BTU/h | 100 BTU/h |
| Operating Temperature | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ | $32-122^{\circ} \mathrm{F}\left(0-50^{\circ} \mathrm{C}\right)$ |
| Storage Temperature | -4-1580\% (-20-70 $\left.{ }^{\circ} \mathrm{C}\right)$ | $-4-158^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ | $-4-158^{\circ} \mathrm{F}\left(-20-70^{\circ} \mathrm{C}\right)$ |
| 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-POE

FortiSwitch 448D-FPOE

## SPECIFICATIONS

|  | FORTISWITCH 524D | FORTISWITCH 524D-FP0E | FORTISWITCH 548D | FORTISWITCH 548D-FPOE |
| :---: | :---: | :---: | :---: | :---: |
| Hardware Specifications |  |  |  |  |
| Total Network Interfaces | 24 GE/R.J45 ports, <br> 4x 10 GE SFP+ ports and <br> $2 \times 40$ GE QSFP <br> Note: SFP+ ports are compatible <br> with 1G SFP | $\begin{aligned} & 24 \text { GE/RJ. } 45 \text { ports, } \\ & 4 \times 10 \text { GE SFP+ ports and } \\ & 2 \times 40 \text { GE QSFP } \\ & \text { Note: SFP+ ports are compatible } \\ & \text { with } 1 \text { G SFP } \end{aligned}$ | 48x GE/RJ45 ports, <br> $4 \times 10$ GE SFP+ ports and $2 \times 40$ GE QSFP <br> Note: SFP+ ports are compatible with 1G SFP | 48x GE/RJ45 ports, <br> $4 \times 10$ GE SFP+ ports and <br> $2 \times 40$ GE QSFP <br> 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 (802.3at/at) | N/A | 48 (802.3at/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 |  |  |  |  |
| Switch Type | Web and CLI Manage | Web and CLI Manage | Web and CLI Manage | Web and CLI Manage |
| 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 | <2 2 s | <2 s | <2 s | <2 s |
| VLANs Supported | 4K | 4K | 4K | 4K |
| Link Aggregation Group Size | 24 | 24 | 24 | 24 |
| 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 Width x Length (inches) | $1.7 \times 17.3 \times 13.8$ | $1.7 \times 17.3 \times 13.8$ | $1.7 \times 17.3 \times 13.8$ | $1.7 \times 17.3 \times 13.8$ |
| Height $\times$ Width $\times$ Length (mm) | $44 \times 440 \times 310$ | $44 \times 440 \times 310$ | $44 \times 440 \times 310$ | $44 \times 440 \times 310$ |
| Weight | $13.6 \mathrm{lbs}(6.2 \mathrm{~kg})$ | $15.74 \mathrm{lbs}(7.14 \mathrm{~kg})$ | 14.1 lbs ( 6.4 kg ) | $15.74 \mathrm{lbs}(7.14 \mathrm{~kg})$ |
| Environment |  |  |  |  |
| Power Required | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ | 100-240V AC, $50-60 \mathrm{~Hz}$ |
| Power Supply | 150 WAC 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 <br> (for 150 W backup only) | Optional FS-PSU-900 <br> (for 900 W for additional PoE) |
| Power Consumption (Average / Maximum) | 75 W | 570 W/579 W (full PoE load) | 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// (full PoE loading) |
| Operating Temperature | $32-113^{\circ} \mathrm{F}\left(0-45^{\circ} \mathrm{C}\right)$ | $32-113^{\circ} \mathrm{F}$ ( $0-45^{\circ} \mathrm{C}$ ) | $32-113^{\circ} \mathrm{F}\left(0-45^{\circ} \mathrm{C}\right)$ | $32-113^{\circ} \mathrm{F}$ (0-45 $\left.{ }^{\circ} \mathrm{C}\right)$ |
| Storage Temperature | $-40-158^{\circ} \mathrm{F}\left(-40-70^{\circ} \mathrm{C}\right)$ | $-40-158^{\circ} \mathrm{F}\left(-40-70^{\circ} \mathrm{C}\right)$ | $-40-158^{\circ} \mathrm{F}\left(-40-70^{\circ} \mathrm{C}\right)$ | $-40-158^{\circ} \mathrm{F}\left(-40-70^{\circ} \mathrm{C}\right)$ |
| 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

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


FortiSwitch 524D


FortiSwitch 524D-FPOE


FortiSwitch 548D-FPOE

## ORDER INFORMATION

| Product | SKU | Description |
| :---: | :---: | :---: |
| FortiSwitch 108D-POE | FS-108D-POE | L2 PoE Switch — $8 x$ GE RJ45 ports (including $8 x$ PoE ports with 75 W power budget), 2 x shared media pairs (including 2 x GE RJ45, $2 x$ GE SFP slots). FortiGate switch controller compatible. |
| FortiSwitch 124D | FS-124D | L2 Switch - $24 \times$ GE RJ45 ports, $2 \times$ GE SFP slots. Fanless switch. FortiGate switch controller compatible. |
| FortiSwitch 124D-POE | FS-124D-POE | L2 PoE Switch - $24 \times$ GE RJ45 ports (including $12 \times$ PoE+ ports with 100 W power budget), $2 \times$ GE SFP slots. FortiGate switch controller compatible. |
| FortiSwitch 224D-POE | FS-224D-POE | L2 PoE Switch — 20x GE RJ45 ports (including $12 x$ PoE ports with 185 W power budget), $4 x$ shared media pairs (including 4x GE RJ45, 4x GE SFP slots). FortiGate switch controller compatible. |
| FortiSwitch 224D-FPOE | FS-224D-FPOE | L2 POE+ Switch - $24 \times$ GE RJ45 ports, $2 \times 1$ GE SFP slots. FortiGate switch controller compatible. |
| FortiSwitch 248D-POE | FS-248D-POE | L2 POE Switch - $48 \times \mathrm{GE}$ RJ45 ports (24 PoE), $2 \times 1$ GE SFP slots. Foritigate 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 424D | FS-424D | L2 Switch - $24 \times$ GE RJ45 ports, $2 \times 10$ GE SFP+ ports, FortiGate switch controller compatible. |
| FortiSwitch 424D-POE | FS-424D-POE | L2 POE+ Switch - $24 \times$ GE RJ45 ports, $2 \times 10$ 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, $4 \times 10$ GE SFP+ slots. FortiGate switch controller compatible. |
| FortiSwitch 448D-FPOE | FS-448D-FPOE | L2 POE+ Switch ( 370 W) - 48x GE RJ45 ports, $4 \times 10$ GE SFP+ slots. FortiGate switch controller compatible. |
| FortiSwitch 524D | FS-524D | L2 Switch - $24 \times$ GE RJ45 ports, $4 \times 10$ GE SFP+ slots, $2 \times 40$ GE QSFP+ slots. FortiGate switch controller compatible. |
| FortiSwitch 524D-FPOE | FS-524D-FPOE | L2 POE+ Switch - $24 \times$ GE RJ45 ports, $4 \times 10$ GE SFP+ slots, $2 \times 40$ GE QSFP+ slots. FortiGate switch controller compatible. |
| FortiSwitch 548D | FS-548D | L2 Switch - 48x GE RJ45 ports, $4 \times 10$ GE SFP+ slots, $2 \times 40$ 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, $2 \times 40$ GE QSFP+ slots. FortiGate switch controller compatible. |
| Accessories |  |  |
| 1 GE SFP RJ45 Transceiver Module | FG-TRAN-GC | 1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP + slots. |
| 1 GE SFP SX Transceiver Module | FG-TRAN-SX | 1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots. |
| 10 GE SFP+ Transceiver Module, Short Range | FG-TRAN-SFP+SR | 10 GE SFP + transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots |
| 10 GE SFP+ Transceiver Module, Short Range | FS-TRAN-SFP+SR | 10 GE SFP+ transceiver module, short range for FortiSwitch (D-series) with SFP+ and SFP/SFP + slots. |
| 1 GE SFP RJ45 Transceiver Module | FS-TRAN-GC | 1 GE SFP RJ45 transceiver module for FortiSwitch (D-series) with SFP and SFP/SFP+ slots. |
| 1 GE SFP LX Transceiver Module, SMF | FR-TRAN-LX | 1 GE SFP LX transceiver module, $-40-85^{\circ} \mathrm{C}$, over SMF, for all systems with SFP and SFP/SFP+ slots, |
| 10 GBase-ER SFP+ Transceiver Module | FS-TRAN-SFP+ER | 10 GBase-ER SFP+ transceiver module, 1550nm. SMF, 40km range for systems with SFP+ slots. |
| External Redundant AC Power Supply | FRPS-100* | External redundant AC power supply for up to 4 units: FG-300C, FG-310B, FS-348B and FS-448B. Up to 2 units: FG-200B, FG-200D, FG-240D, FG-300D, FG-500D, FDD-200B, FDD-400B, FDD-600B and FDD-800B. Not supported for: FG-200D-POE/240D-POE. |
|  | 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.** |

*Works with the FS-448B and FS-348B.
** Provides additional PoE capacity.

Ffintinet.

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[^0]:    ** enabled with FOS 5.4 release

[^1]:    * Check Release notes/Admin guide for Static Routing release details.
    ** MIBs have been tested with Solarwinds NPM tool

