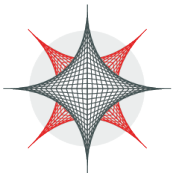
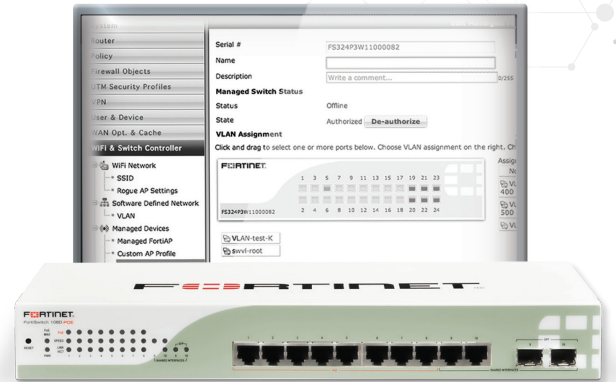


FortiSwitch™ Secure Access Series

FortiSwitch Secure Access switches deliver a Secure, Simple, Scalable Ethernet solution with outstanding security, performance and manageability for threat conscious small to mid-sized businesses, distributed enterprises and branch offices. Tightly integrated into the

FortiGate® Network Security Platform, the FortiSwitch Secure Access switches can be managed directly from the familiar FortiGate interface. This single pane of glass management provides complete visibility and control of all users and devices on the network, regardless of how they connect.

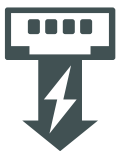


Security Fabric Integration

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

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

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



Simplify Network Deployment

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

Product Offerings

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



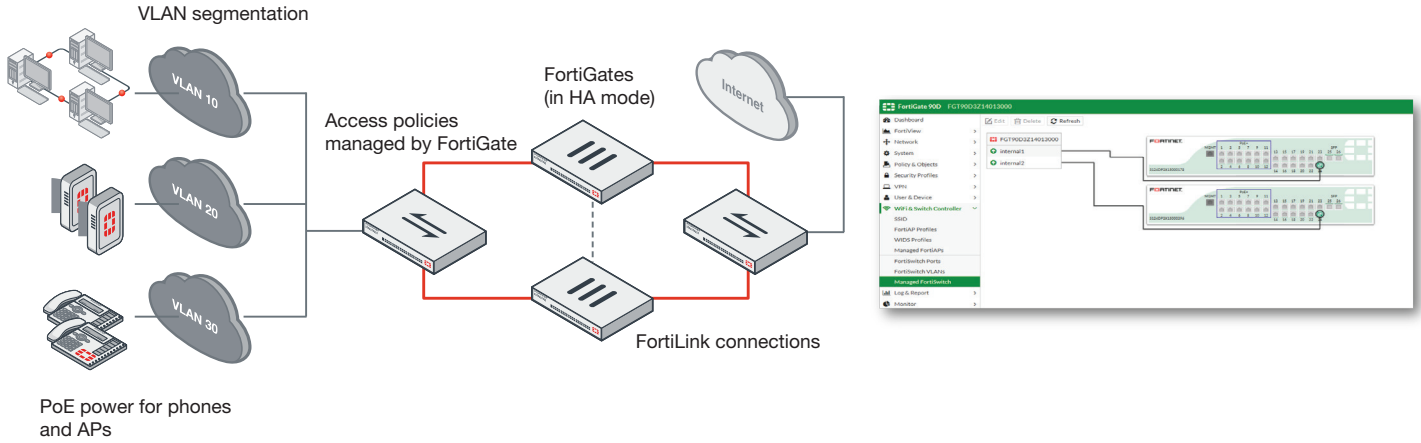
Highlights

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

DEPLOYMENT

FortiLink Mode

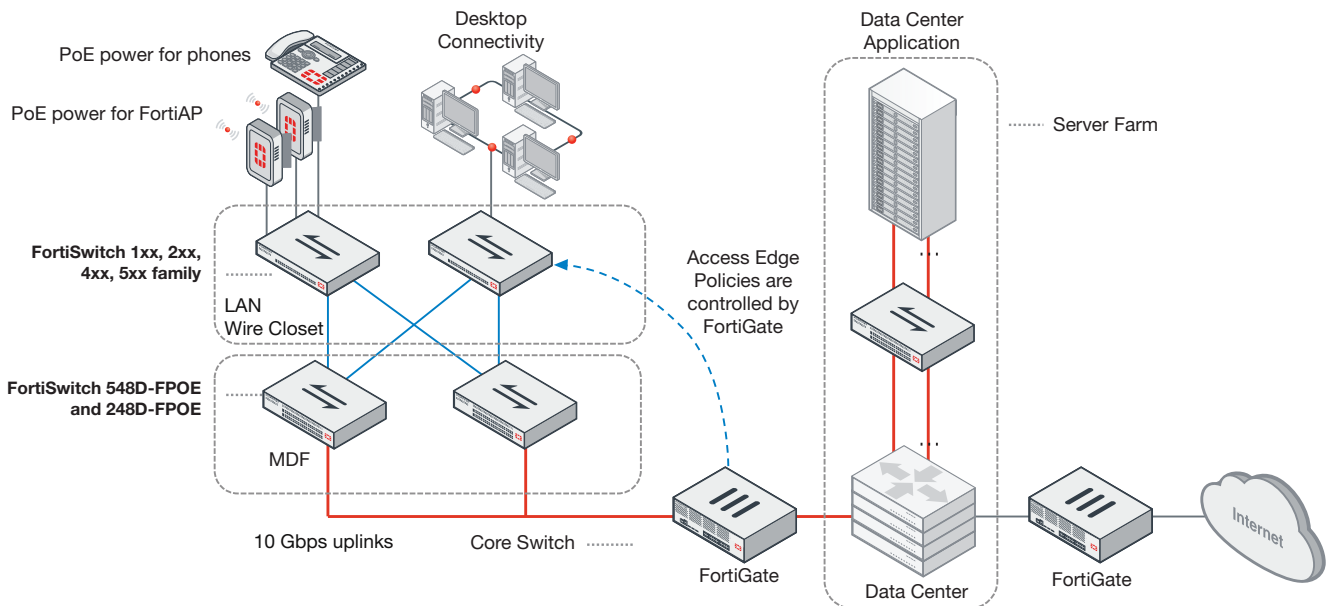
The FortiSwitch Secure Access Switch series integrates directly into the FortiGate* Connected UTM, with switch administration and access port security managed from the familiar FortiGate interface. Regardless of how users and devices connect to the network, you have complete visibility and control over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



* Selected models only

Standalone Mode

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



FEATURES

| FORTISWITCH FORTILINK MODE (WITH FORTIGATE) | | | |
|--|---|----------------------------|----------------------------|
| Management and Configuration | | | |
| Auto Discovery of Multiple Switches | Yes | | |
| Number of Managed Switches per FortiGate | 8 to 256 Depending on FortiGate Model (Please refer to admin guide) | | |
| FortiLink Stacking (Auto Inter-Switch Links) | Yes | | |
| Software Upgrade of Switches | Yes | | |
| Centralized VLAN Configuration | Yes | | |
| Switch POE Control | Yes | | |
| Link Aggregation Configuration | Yes | | |
| Spanning Tree | Yes | | |
| LLDP/MED | Yes | | |
| IGMP Snooping | Yes (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/White Listing | Yes (FortiGate) | | |
| Policy Control of Users and Devices | Yes (FortiGate) | | |
| UTM Features | | | |
| Firewall | Yes (FortiGate) | | |
| IPC, AV, Application Control, Botnet | Yes (FortiGate) | | |
| High Availability | | | |
| Support FortiLink FortiGate in HA Cluster | Yes | | |
| LAG support for FortiLink Connection | Yes | | |
| Active-Active Split LAG from FortiGate to FortiSwitches for Advanced Redundancy | Yes (with FS-2xx, 4xx, 5xx) | | |
| | | | |
| | FORTISWITCH STANDALONE MODE | FORTISWITCH 2XXE SERIES | FORTISWITCH 1XXE SERIES |
| Layer 2 | | | |
| Jumbo Frames | Yes | Yes | Yes |
| Auto-negotiation for Port Speed and Duplex | Yes | Yes | Yes |
| IEEE 802.1D MAC Bridging/STP | Yes | Yes | Yes |
| IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) | Yes | Yes | Yes |
| IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) | Yes | Yes | Yes |
| STP Root Guard | Yes | Yes | Yes |
| STP BPDU Guard | Yes | Yes | Yes |
| Edge Port / Port Fast | 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-dst-ip, src-dst-mac, src-ip, src-mac) | Yes | Yes | Yes |
| 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 802.3 10Base-T | Yes | Yes | Yes |
| IEEE 802.3u 100Base-TX | Yes | Yes | Yes |
| IEEE 802.3z 1000Base-SX/LX | Yes | Yes | Yes |
| IEEE 802.3ab 1000Base-T | 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 |
| 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 |
| Time-Domain Reflectometry (TDR) Support | Yes | Yes | No |

FEATURES

| | FORTISWITCH STANDALONE MODE | FORTISWITCH 2XXE SERIES | FORTISWITCH 1XXE SERIES |
|---|--|----------------------------|----------------------------|
| Layer 3* | | | |
| Static Routing (Hardware-based) | Yes | Yes | N/A |
| Routing Entries | 64 on FS-2xx, 4xx Family; 16K on FS-5xx Family | 64 | N/A |
| Host Entries | 4K on FS-2xx, 4xx Family; 24K on FS-5xx Family | 4K | N/A |
| Dynamic Routing Protocols** | OSPFv2, RIPv2, VRRP; BGP, ISIS on FS-5xx | OSPFv2, RIPv2, VRRP | N/A |
| 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 | | | |
| IGMP Snooping | Yes | Yes | No |
| Security and Visibility | | | |
| Port Mirroring | Yes | Yes | Yes |
| Admin Authentication Via RFC 2865 RADIUS | Yes | Yes | Yes |
| IEEE 802.1x authentication Port-based | Yes | Yes | Yes |
| IEEE 802.1x Authentication MAC-based | Yes | Yes | Yes |
| IEEE 802.1x Guest and Fallback VLAN | Yes | Yes | Yes |
| IEEE 802.1x MAC Access Bypass (MAB) | Yes | Yes | Yes |
| IEEE 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 |
| IEEE 802.1ab Link Layer Discovery Protocol (LLDP) | Yes | Yes | Yes |
| IEEE 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 |
| High Availability | | | |
| Multi-Chassis Link Aggregation (MCLAG) | Yes (2xx, 4xx and 5xx) | Yes | N/A |
| Quality of Service | | | |
| IEEE 802.1p Based Priority Queuing | Yes (2xx, 4xx and 5xx) | Yes | No |
| IP TOS/DSCP Based Priority Queuing | Yes (2xx, 4xx and 5xx) | Yes | No |
| Management | | | |
| IPv4 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 |
| Managed 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 |
| RFC 854 Telnet Server | Yes | Yes | Yes |
| RFC 2865 RADIUS | Yes | Yes | Yes |
| RFC 1643 Ethernet-like Interface MIB | Yes | Yes | Yes |
| RFC 1213 MIB-II | Yes | Yes | Yes |
| RFC 1354 IP Forwarding Table MIB | Yes | Yes | Yes |
| RFC 2572 SNMP Message Processing and Dispatching | Yes | Yes | Yes |
| RFC 1573 SNMP MIB II | Yes | Yes | Yes |
| RFC 1157 SNMPv1/v2c | Yes | Yes | Yes |
| RFC 2030 SNTP | Yes | Yes | Yes |

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

SPECIFICATIONS

| | FORTISWITCH 108E | FORTISWITCH 108E-POE | FORTISWITCH 108E-FPOE |
|---------------------------------------|---|--|--------------------------|
| Hardware Specifications | | | |
| Total Network Interfaces | 7x GE RJ45, 1x GE/POE-PD RJ45 and 2x GE SFP | 8x GE RJ45 and 2x GE SFP | 8x GE RJ45 and 2x GE SFP |
| Dedicated Management 10/100 Port | 0 | 0 | 0 |
| RJ-45 Serial Console Port | 1 | 1 | 1 |
| Form Factor | Desktop | 1 RU Rack Mount | 1 RU Rack Mount |
| Power over Ethernet (PoE) Ports | 0 | 4 (802.3af/at) | 8 (802.3af/at) |
| PoE Power Budget | 0 | 65 W | 130 W |
| Mean Time Between Failures | > 10 years | > 10 years | > 10 years |
| System Specifications | | | |
| Switching Capacity (Duplex) | 20 Gbps | 20 Gbps | 20 Gbps |
| Packets Per Second (Duplex) | 30 Mpps | 30 Mpps | 30 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) | 1.5 x 6.3 x 8.7 | 1.7 x 8.2 x 13 | 1.7 x 8.2 x 13 |
| Height x Depth x Width (mm) | 38 x 160 x 220 | 44 x 209 x 330 | 44 x 209 x 330 |
| Weight | 2.2 lbs (1 kg) | 4.3 lbs (1.95 kg) | 4.5 lbs (2.04 kg) |
| Environment | | | |
| Power Required | 100–240V AC, 50–60 Hz / PoE-PSE(af) | 100–240V AC, 50–60 Hz | 100–240V AC, 50–60 Hz |
| Power Supply | AC & PoE-PD Built in | AC Built in | AC Built in |
| Redundant Power | — | — | — |
| Power Consumption (Average / Maximum) | 5.54 W / 6.26 W | 70.19 W / 71.10 W | 135.19 W / 136.10 W |
| Heat Dissipation | 18.9 BTU/h | 17.7 BTU/h | 17.7 BTU/h |
| Operating Temperature | 32–104°F (0–40°C) | 32–104°F (0–40°C) | 32–104°F (0–40°C) |
| Storage Temperature | -40–158°F (-40–70°C) | -40–158°F (-40–70°C) | -40–158°F (-40–70°C) |
| Humidity | 10–90% non-condensing | 10–90% non-condensing | 10–90% non-condensing |
| Certification and Compliance | | | |
| | | 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 108E



FortiSwitch 108E-POE



FortiSwitch 108E-FPOE

SPECIFICATIONS

| | 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 | 32–104°F (0–40°C) | 32–104°F (0–40°C) | 32–104°F (0–40°C) |
| Storage Temperature | -40–158°F (-40–70°C) | -40–158°F (-40–70°C) | -40–158°F (-40–70°C) |
| Humidity | 10–90% non-condensing | 10–90% non-condensing | 10–90% non-condensing |
| Certification and Compliance | | | |
| | FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2 | | |
| Warranty | | | |
| Fortinet Warranty | Limited lifetime* warranty on all models | | |

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



FortiSwitch 124E



FortiSwitch 124E-POE



FortiSwitch 124E-FPOE

SPECIFICATIONS

| | 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 | |
| Warranty | | | |
| Fortinet Warranty | | Limited lifetime* warranty on all models | |

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



FortiSwitch 224D-FPOE



FortiSwitch 224E



FortiSwitch 224E-POE

SPECIFICATIONS

| | FORTISWITCH 248D | FORTISWITCH 248E-POE | FORTISWITCH 248E-FPOE |
|---------------------------------------|--|--|--|
| Hardware Specifications | | | |
| Total Network Interfaces | 48x GE RJ45 ports and 4x GE SFP ports | 48x GE RJ45 ports and 4x GE SFP ports | 48x GE RJ45 ports and 4x GE SFP ports |
| Dedicated Management 10/100 Port | 1 | 1 | 1 |
| 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/802.3at) | 48 (802.3at/802.3at) |
| PoE Power Budget | N/A | 370 W | 740 W |
| Mean Time Between Failures | > 10 years | > 10 years | > 10 years |
| System Specifications | | | |
| Switching Capacity (Duplex) | 104 Gbps | 104 Gbps | 104 Gbps |
| Packets Per Second (Duplex) | 155 Mpps | 155 Mpps | 155 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 9.68 x 17.3 | 1.73 x 16.1 x 17.3 | 1.73 x 16.1 x 17.3 |
| Height x Depth x Width (mm) | 44 x 246 x 440 | 44 x 410 x 440 | 44 x 410 x 440 |
| Weight | 7.81 lbs (3.54 kg) | 12.12 lbs (5.5 kg) | 13.44 lbs (6.1 kg) |
| Environment | | | |
| Power Required | 100–240V AC, 50–60 Hz | 100–240V AC, 50–60 Hz | 100–240V AC, 50–60 Hz |
| Power Supply | AC built in | AC built in | AC built in |
| Redundant Power | — | Optional FRPS-740 | Optional FRPS-740 |
| Power Consumption (Average / Maximum) | 38.66 W / 39.19 W | 457.46 W / 466.47 W | 842 W / 855.02 W |
| Heat Dissipation | 134 BTU/h | 177.14268 BTU/h | 162.87865 BTU/h |
| Operating Temperature | 32–122°F (0–50°C) | 32–122°F (0–50°C) | 32–122°F (0–50°C) |
| Storage Temperature | -4–158°F (-20–70°C) | -4–158°F (-20–70°C) | -4–158°F (-20–70°C) |
| Humidity | 10–90% non-condensing | 10–90% non-condensing | 10–90% non-condensing |
| Certification and Compliance | | | |
| | | FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2 | |
| Warranty | | | |
| Fortinet Warranty | | Limited lifetime* warranty on all models | |

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



FortiSwitch 248D



FortiSwitch 248E-POE



FortiSwitch 248E-FPOE

SPECIFICATIONS

| | FORTISWITCH 424D | FORTISWITCH 424D-POE | FORTISWITCH 424D-FPOE |
|---------------------------------------|---|---|---|
| Hardware Specifications | | | |
| Total Network Interfaces | 24x GE RJ45 and 2x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP | 24x GE RJ45 and 2x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP | 24x GE RJ45 and 2x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP |
| Dedicated Management 10/100 Port | 1 | 1 | 1 |
| RJ-45 Serial Console Port | 1 | 1 | 1 |
| Form Factor | 1 RU Rack Mount | 1 RU Rack Mount | 1 RU Rack Mount |
| Power over Ethernet (PoE) Ports | — | 24 (802.3af/at) | 24 (802.3af/at) |
| PoE Power Budget | N/A | 185 W | 370 W |
| Mean Time Between Failures | > 10 years | > 10 years | > 10 years |
| System Specifications | | | |
| Switching Capacity (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 | | | |
| Fortinet Warranty | Limited lifetime* warranty on all models | | |

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



FortiSwitch 424D



FortiSwitch 424D-POE



FortiSwitch 424D-FPOE

SPECIFICATIONS

| | FORTISWITCH 448D | FORTISWITCH 448D-POE | FORTISWITCH 448D-FPOE |
|---------------------------------------|---|---|---|
| Hardware Specifications | | | |
| Total Network Interfaces | 48x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP | 48x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP | 48x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP |
| Dedicated Management 10/100 Port | 1 | 1 | 1 |
| RJ-45 Serial Console Port | 1 | 1 | 1 |
| Form Factor | 1 RU Rack Mount | 1 RU Rack Mount | 1 RU Rack Mount |
| Power over Ethernet (PoE) Ports | — | 48 (802.3af/at) | 48 (802.3af/at) |
| PoE Power Budget | N/A | 370 W | 740 W |
| Mean Time Between Failures | > 10 years | > 10 years | > 10 years |
| System Specifications | | | |
| Switching Capacity (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, RCM, VCCI, BSMI, UL, CB, RoHS2 | |
| Warranty | | | |
| Fortinet Warranty | Limited lifetime* warranty on all models | | |

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



FortiSwitch 448D



FortiSwitch 448D-POE



FortiSwitch 448D-FPOE

SPECIFICATIONS

| | FORTISWITCH 524D | FORTISWITCH 524D-FPOE | FORTISWITCH 548D | FORTISWITCH 548D-FPOE |
|--|---|---|--|--|
| Hardware Specifications | | | | |
| Total Network Interfaces | 24 GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP | 24 GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP | 48x GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP | 48x GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP |
| Dedicated Management 10/100/1000 Ports | 1 | 1 | 1 | 1 |
| RJ-45 Serial Console Port | 1 | 1 | 1 | 1 |
| Form Factor | 1 RU Rack Mount | 1 RU Rack Mount | 1 RU Rack Mount | 1 RU Rack Mount |
| Power over Ethernet (PoE) Ports | N/A | 24 (802.3af/at) | N/A | 48 (802.3af/at) |
| PoE Power Budget | N/A | 400 W | N/A | 750 W |
| Mean Time Between Failures | > 10 years | > 10 years | > 10 years | > 10 years |
| System Specifications | | | | |
| Switching Capacity (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, RoHS, VCCI, BSMI, UL, CB, RoHS2 | | | |
| Warranty | | | | |
| Fortinet Warranty | Limited lifetime* warranty on all models | | | |

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



FortiSwitch 524D



FortiSwitch 524D-FPOE



FortiSwitch 548D



FortiSwitch 548D-FPOE

ORDER INFORMATION

| Product | SKU | Description |
|--|---------------------|---|
| FortiSwitch 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-FPOE | 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-POE | FS-124E-F-POE | Layer 2 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit. |
| FortiSwitch 224D-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. |
| 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-FPOE | 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 maximum 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-FPOE | 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. |
| 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.* |
| 1 GE SFP LX Transceiver Module | FG-TRAN-LX | 1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots. |
| 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, Long Range | FG-TRAN-SFP+LR | 10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots. |
| 40 GE QSFP+ Transceivers, Short Range | FG-TRAN-QSFP+SR | 40 GE QSFP+ transceivers, short range for all systems with QSFP+ slots. |
| 40 GE QSFP+ Transceivers, Long Range | FG-TRAN-QSFP+LR | 40 GE QSFP+ transceivers, long range for all systems with QSFP+ slots. |
| 10 GE SFP+ Active Direct Attach Cable, 10m/32.8 ft | SP-CABLE-ADASFP+ | 10 GE SFP+ active direct attach cable, 10m/32.8 ft for all systems with SFP+ and SFP/SFP+ slots. |
| 1 GE SFP RJ45 transceiver module | FS-TRAN-GC | 1 GE SFP RJ45 transceiver module for systems with SFP/SFP+ slots |
| 10 GE Copper SFP+ Transceiver Module, up to 30m | FS-TRAN-SFP+GC | 10 GE copper SFP+ RJ45 transceiver. Up to 30m. |
| 10 GE SFP+ Transceiver Module, Short Range | FS-TRAN-SFP+SR | 10 GE SFP+ transceiver module, short range for FortiSwitch with SFP+ and SFP/SFP+ slots. |
| 10 GE SFP+ Transceivers, Extended Range | FS-TRAN-SFP+EX | 10 GE SFP+ transceiver module, extended range for Fortinet systems with SFP+ slots. |
| 10 GE SFP+ Transceivers, Long Range Multimode | FS-TRAN-SFP+LRM | 10 GE SFP+ transceiver module, long range multimode for Fortinet systems with SFP+ slots. |
| 40 GE QSFP+ to 4x 10 GE SFP+ optical breakout, 1m | FG-TRAN-QSFP-4XSFP | 40 GE QSFP+ parallel breakout MPO to 4x LC connectors, 1m reach, transceivers not included. |
| 40 GE QSFP+ to 4x 10 GE SFP+ optical breakout, 5m | FG-TRAN-QSFP-4SFP-5 | 40 GE QSFP+ parallel breakout MPO to 4x LC connectors, 5m reach, transceivers not included. |
| 10 GE SFP+ Passive Direct Attach Cable | SP-CABLE-FS-SFP+1 | 10 GE SFP+ passive direct attach cable, 1m for systems with SFP+ and SFP/SFP+ slots. |
| 10 GE SFP+ Passive Direct Attach Cable | SP-CABLE-FS-SFP+3 | 10 GE SFP+ passive direct attach cable, 3m for systems with SFP+ and SFP/SFP+ slots. |

* Provides additional PoE capacity.

ORDER INFORMATION

Accessories

| | | |
|---|--------------------|--|
| 10 GE SFP+ Passive Direct Attach Cable | SP-CABLE-FS-SFP+5 | 10 GE SFP+ passive direct attach cable, 5m for systems with SFP+ and SFP/SFP+ slots. |
| 10 GE SFP+ Passive Direct Attach Cable | SP-CABLE-FS-SFP+7 | 10 GE SFP+ passive direct attach cable, 7m for systems with SFP+ and SFP/SFP+ slots. |
| 40 GE QSFP+ Passive Direct Attach Cable | SP-CABLE-FS-QSFP+1 | 40 GE QSFP+ passive direct attach cable, 1m for systems with QSFP+ slots. |
| 40 GE QSFP+ Passive Direct Attach Cable | SP-CABLE-FS-QSFP+3 | 40 GE QSFP+ passive direct attach cable, 3m for systems with QSFP+ slots. |
| 40 GE QSFP+ Passive Direct Attach Cable | SP-CABLE-FS-QSFP+5 | 40 GE QSFP+ passive direct attach cable, 5m for systems with QSFP+ slots. |

For details of Transceiver modules, see the [Fortinet Transceivers datasheet](#).



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