

FortiSwitch™

Gigabit Ethernet Switches



Fortinet's FortiSwitch family of Gigabit Ethernet (GbE) switches with 10-Gigabit Ethernet uplinks delivers outstanding price, performance, and scalability. The FortiSwitch platforms are purpose-built for high performance computing and flexibility in any environment, from the small office to the data center.

The FortiSwitch-248B Ethernet Switch is a high performance 10/100/1000 switch with quad dual-speed 1/10 SFP+ fiber uplinks ports, allowing up to 40 Gbps of traffic to the core switch. Fortinet designed this switching platform for data center top-of-rack server aggregation, or as a high performance access edge switch for the wire closet.

Packaged in a compact 1RU form factor, the FortiSwitch-248B platform delivers full wire-speed Layer 2 switch features at an industry-leading price point. It quickly connects your devices to the Ethernet fabric and reduces your overall data center deployment costs. The high port density and dual-speed SFP+ ports maximize your ability to meet future requirements while providing compatibility to existing 1 GbE fiber ports and your future 10 GbE fiber, without any additional cost.

The FortiSwitch-80-POE provides full 15.4 Watts/port of Power over Ethernet (POE) in a cost-effective form factor for the distributed enterprise or small office. This eight-port GbE switch provides 62 Watts of POE power to four devices, the highest in the industry. You can connect wireless access points (such as the FortiAP product family), IP phones (such as the FortiFone product family), and IP cameras to the POE ports. The FortiSwitch-80-POE eliminates the need for additional POE injectors, simplifying your small office network while improving performance. The remaining four GbE ports can accommodate uplink ports as well as additional devices such as printers, and back office equipment.

High Performance Switching Platform

- 4 dual-speed uplink ports on the FortiSwitch-248B offer maximum flexibility for dynamic networks
- 4 POE ports on the FortiSwitch-80-POE deliver convenience and flexibility for smaller networks
- Switch security features protect vulnerable infrastructure without adding latency

Features	Benefits
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Wire-Speed Performance	Wire speed 10/100/1000 ports deliver peak performance, regardless of application.
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Versatile Ports	FS-248B provides dual-speed 1 GbE/10 GbE uplinks; FS-80-POE provides 4 POE ports.
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Low-Power Design	FS-248B lowers energy costs with average power consumption of less than 3 watts per port.
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FortiSwitch-248B



FortiSwitch-80-POE

FortiSwitch-248B Features

LAYER 2 FEATURES

Wire speed L2 switching performance
10/100/1000 BASE-T ports supporting auto-sensing, auto-negotiation
MDI/MDIX Jumbo frame support: 9K
Flow control

- IEEE 802.3x full duplex mode
- Back-pressure flow control in half duplex mode

Broadcast, unicast and multicast storm protection
IGMP snooping
VLAN

- IEEE 802.1Q VLAN
- GARP/GVRP/GMRP
- Up to 512 VLANs, with up to 3965 VLAN IDs
- Port-based VLAN
- Protocol-based VLAN Spanning tree
- IEEE 802.1d Spanning Tree Protocol
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree Link aggregation
- Up to 6 trunk groups
- Up to 8 ports per trunk group
- 802.3ad link aggregation and LACP
- Static trunk group
- Load balance for unicast and multicast traffic

Port mirror (many-to-1)

PERFORMANCE SPECIFICATIONS

Forwarding mode: Store-and-forward
Mean Time Between Failures (MTBF):
46,140 hours

SECURITY

User/password-protected system management
RADIUS client
TACACS+ client
SSH v1/v2
SSL v3/TLS v1
IEEE 802.1x
Port MAC lock

MULTICAST

Layer-2 IGMP snooping

QUALITY OF SERVICE

802.1p-based CoS
8 priority queues per port
IP TOS/precedence-based CoS
DSCP-based CoS
Policy-based Diffserv

MANAGEMENT

BOOTP and DHCP for IP address assignment
DHCP relay
XMODEM/FTP/TFTP
Dual firmware images
Up to three configuration files including factory default
SSH v1/v2 switch management
SSL v3/TLS v1 switch management
Simple Network Time Protocol (SNTP)
Telnet, Ping and Trace route functions
DNS client and DNS relay functions
Message/event/error/trap logs
Logging to local file and syslog server
Common command line interface (CLI) switch management
Web switch management
SNMP v1, v2c, and v3 switch management
Private Enterprise MIB
RMON groups 1, 2, 3, and 9
Port mirror (many-to-1)

NETWORK PROTOCOLS AND STANDARDS COMPATIBILITY

IEEE 802.3 10BASE-T
IEEE 802.3u 100BASE-TRX
IEEE 802.3z 1000BASE-SX
IEEE 802.3x Flow Control
IEEE 802.3ad Link Aggregation
IEEE 802.1v Protocol VLAN and Port VLAN
IEEE 802.1d Spanning Tree Protocol
IEEE 802.1s Multiple Spanning Tree Protocol

SYSTEM PARAMETERS

Maximum RADIUS servers 3
Maximum RADIUS accounting servers 1
Maximum TACACS servers 3
Maximum IP filter addresses 5
Maximum telnet or SSH sessions 5
Maximum WEB sessions 8
Number of 802.1p traffic classes 8
Number of MSTP instances 5
Number of ACL 100
Number of rules in an ACL 10
Maximum classes 32
Maximum rules per class 7
Maximum member classes per policy 10
Maximum attributes per class 1

SWITCH SECURITY FEATURES

Port security and Broadcast, Multicast, Unicast Storm control
Dynamic ARP inspection
DHCP snooping
Spanning tree guards : BPDU filter + BPDU guard + loop guard + root guard + TCN guard
Denial of service protection: TCP fragment, Min TCP HDR, ICMP Size, ICMP fragment, SIP=DIP, TCP Flag checking, TCP Fragment offset checking

FIREWALL LOADBALANCING

HASH function for symmetric distribution of traffic across 8 firewalls

FortiSwitch-80-POE Features

LAYER 2 FEATURES

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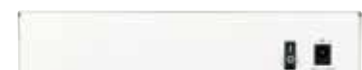
FortiSwitch-248B (Front)



FortiSwitch-248B (Rear)



FortiSwitch-80-POE (Front)



FortiSwitch-80-POE (Rear)

	FortiSwitch-248B	FortiSwitch-80-PoE
Performance Specifications		
Switch Type	Managed	Unmanaged
Throughput (Max)	176 Gbps	2 Gbps
MAC Address Storage	32,000	2,000
VLANs Supported	512	N/A
Link Aggregation Group Size	Up to 8 ports	N/A
Total Link Aggregation Groups	8	N/A
Hardware Specifications		
10/100/1000 Ports	48	8
10 GbE Uplink Ports	4 Dual Speed SFP+ capable of 1-GbE and 10-GbE speeds	0
POE Ports	0	4 802.3af
POE Power Budget	N/A	62 Watts
Console Port	1	0
Dimensions		
Rack Mountable	1 RU Rack-Mount Appliance	Desktop Appliance
Height	1.67 in (4.24 cm)	1.5 in (3.8 cm)
Width	17.32 in (44.00 cm)	4.7 in (12 cm)
Length	10.8 in (27.44 cm)	7.5 in (19 cm)
Weight	12.83 lbs (5.82 Kg)	1.64 lbs (.75 kg)
Environment		
Voltage Range	100-240V AC 50-60 Hz	100-240V AC 50-60 Hz
Power Consumption	140 W	6.2 W (POE off) 68.2W (POE on, based on 4 POE devices)
Storage Temperature	32 - 122 deg F (0 - 50 deg C)	
Operating Temperature	32 - 104 deg F (0 - 40 deg C)	
Humidity	5 - 95% RH non-condensing	

All performance values are "up to" and vary depending on system configuration.

Ordering Info		
Product	SKU	Description
FortiSwitch-248B	FS-248B	48 10/100/1000 port top of rack switch with 4 x 10G SFP+ uplink ports
FortiSwitch-80-POE	FS-80-POE	8 10/100/1000 port switch with POE



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