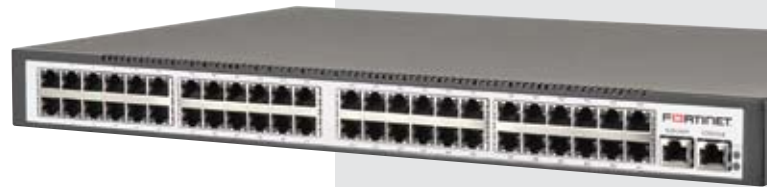


# FortiSwitch™ -100

## Top-of-Rack Ethernet Switch



FortiSwitch Gigabit Ethernet (GbE) and 10-Gigabit Ethernet (10 GbE) fabric switching platforms deliver outstanding price, performance, scalability, and simplified management using familiar, standards-compliant Ethernet. The platforms' architecture is purpose-built for high performance computing and data center environments. At the spine and edge of the fabric, they provide high density, non-blocking 10 GbE ports at one-third the rack space and one-fifth the power requirements of traditional data center switching solutions.

The FortiSwitch-100 Ethernet Switch is a purpose-built, high performance GbE and 10 GbE switching platform designed for data center top-of-rack server aggregation. Packaged in a compact 1RU form factor, the FortiSwitch-100 platform delivers full wire speed Layer 2/3/4 switch features at industry-leading price points. Working in conjunction with the FortiSwitch-1000 or FortiSwitch-500 platforms, the FortiSwitch-100 platform connects devices to the Ethernet fabric and reduces overall data center deployment costs. It also preserves key performance innovations, including Fortinet's exclusive vScale™ dynamic congestion avoidance and multi-path traffic switching features. The FortiSwitch-100 platform comes with 48 wire speed 10/100/1000 ports. Options include four 10 GbE active CX4 or four 10 GbE SFP+ uplinks.

Features	Benefits
----------	----------

**Wire-Speed Performance**

Wire speed 10/100/1000 ports deliver peak performance, regardless of application



FortiSwitch-100 (CX4)

**High Density Interfaces**

48 10/100/1000 ports with 4 10 GbE uplink ports in a 1 RU platform



FortiSwitch-100 (SFP+)

**Low-Power Design**

Lowered energy requirements with an average power consumption of less than 3 watts per port

## FortiSwitch-100

### Performance Specifications

Throughput (Max)	176 Gbps
MAC Address Storage	8,000
VLANs Supported	512
Link Aggregation Group Size	up to 8 ports
Total Link Aggregation Groups	6

### Hardware Specifications

10/100/1000 Ports	48
10 GbE Uplink Ports	4 Base-CX4 (Active) 4 Base-SFP+
Console Port	1
1 + 1 Power Redundancy	No
Field-Serviceable Power Supply	No
Field-Serviceable Fan Unit	No
Power Consumption	156 W

### Dimensions

Height	1RU Appliance 1.67 in (4.24 cm)
Width	17.32 in (44.00 cm)
Length	11.25 in (28.58 cm)
Weight	6.69 lbs (3.1 Kg)

### Supported Transceivers

10 GbE Base-LR (9 micron SMF, 10km)
10 GbE Base-SR (50 micron MMF, 300m)
10 GbE Base-LRM (62.5 micron MMF, 220m)
10 GbE Base-SR Lite (50 micron MMF, 100m)
10 GbE Base-CR (Twinax copper cable, 5m)

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

### LAYER 2 FEATURES

Wire speed L2 switching performance  
10/100/1000 BASE-T ports supporting auto-sensing, auto-negotiation, auto MDI/MDIX Jumbo frame support  
– FS-100 : 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 traffics  
Port mirror (many-to-1)

### PERFORMANCE SPECIFICATIONS

Forwarding mode: Store-and-forward  
Mean Time Between Failures (MTBF): 175,699 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



#### GLOBAL HEADQUARTERS

Fortinet Incorporated  
1090 Kifer Road, Sunnyvale, CA 94086 USA  
Tel +1.408.235.7700  
Fax +1.408.235.7737  
www.fortinet.com/sales

#### EMEA SALES OFFICE – FRANCE

Fortinet Incorporated  
120 rue Albert Caquot  
06560, Sophia Antipolis, France  
Tel +33.4.8987.0510  
Fax +33.4.8987.0501

#### APAC SALES OFFICE – SINGAPORE

Fortinet Incorporated  
61 Robinson Road, #09-04 Robinson Centre  
Singapore 068893  
Tel +65-6513-3730  
Fax +65-6223-6784

Copyright© 2009 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, and FortiGuard®, are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance metrics contained herein were attained in internal lab tests under ideal conditions. Network variables, different network environments and other conditions may affect performance results, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding contract with a purchaser that expressly warrants that the identified product will perform according to the performance metrics herein. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet's internal lab tests. Fortinet disclaims in full any guarantees. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable. Certain Fortinet products are licensed under U.S. Patent No. 5,623,600.