

FortiGate®-3040B/3140B

10-GbE Consolidated Security Appliances



FortiGate-3040B and FortiGate-3140B consolidated security appliances offer exceptional levels of performance, deployment flexibility, and security for large enterprise networks. Built from the ground up by Fortinet, these appliances deliver superior performance through a combination of custom hardware, including FortiASIC™ processors, high port density, and consolidated security features from the FortiOS™ operating system. Whether protecting virtualized infrastructure, cloud-providing infrastructure, or traditional IT infrastructure, 10-Gigabit Ethernet (10-GbE) ports and up to 58 Gbps of firewall throughput make these appliances ideal for securing high-bandwidth networks.

High-Performance Hardware

The FortiGate-3140B appliance provides up to 58 Gbps of firewall throughput and the FortiGate-3040B delivers up to 40 Gbps of firewall performance through the use of innovative FortiASIC processors and the latest generation of general purpose CPUs. Impressive consolidated security performance and support for a variety of configurations ensure that essential security functions keep up with the rest of your network.

High 10-GbE Port Density

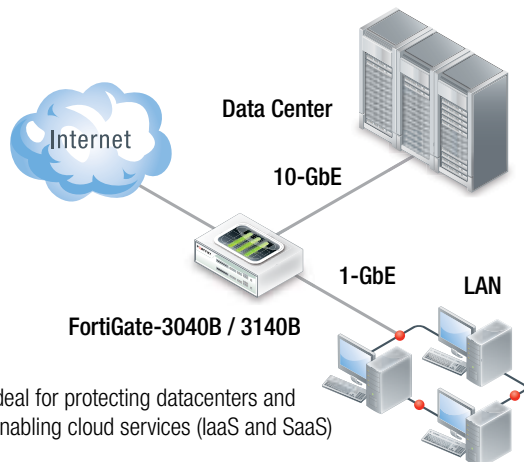
You can protect your data center and other high-bandwidth applications with the 10-GbE interfaces that ship standard on the FortiGate-3040B/3140B appliances. Each platform includes system ports supporting SFP+, SFP, and RJ-45 connections, providing maximum flexibility.

Consolidated Security

Using the advanced FortiOS operating system, FortiGate-3040B/3140B appliances effectively neutralize a wide range of network security threats. Whether deployed as high-performance firewalls or as comprehensive multi-threat security solutions, these dedicated appliances protect assets with some of the most effective security available today.

FortiGate-3040B/3140B Benefits

- Outstanding value as 10-GbE network security appliances with best-in-class firewall price-performance
- Highest 10-GbE port density in their class
- Active Profiling provides behavioral analysis and active response to abnormal behavior
- Complete Content Protection provides application control coupled with identity-based policy enforcement
- IPv6 certified platform
- Strong authentication options for policy compliance



Ideal for protecting datacenters and enabling cloud services (IaaS and SaaS)

FortiGate Certifications



FortiOS 4.0 Software—Raising The Bar

FortiOS 4.0: Redefining Network Security

FortiOS 4.0 is the software foundation of FortiGate multi-threat security platforms. Developed solely for security, performance, and reliability, it is a purpose-built operating system that leverages the power of FortiASIC processors.

Fortinet's ASIC-Based Advantage

FortiASICs are a family of purpose-built, high performance processors that use an intelligent proprietary content scanning engine and multiple algorithms to accelerate security and network services.

FortiOS Security Services

FIREWALL

- ICSA Labs Certified (Enterprise Firewall)
- NAT, PAT, Transparent (Bridge)
- Routing Mode (RIP, OSPF, BGP, Multicast)
- Policy-Based NAT
- Virtual Domains (NAT/Transparent mode)
- VLAN Tagging (802.1Q)
- Group-Based Authentication & Scheduling
- SIP/H.323 /SCCP NAT Traversal
- WINS Support
- Explicit Proxy Support (Citrix/TS etc.)
- VoIP Security (SIP Firewall/RTP Pinholing)
- Granular Per-Policy Protection Profiles
- Identity/Application-Based Policy
- Vulnerability Management
- IPv6 Support (NAT/Transparent mode)

VIRTUAL PRIVATE NETWORK (VPN)

- ICSA Labs Certified (IPSec)
- PPTP, IPSec, and SSL Dedicated Tunnels
- SSL-VPN Concentrator (incl. iPhone client support)
- DES, 3DES, and AES Encryption Support
- SHA-1/MD5 Authentication
- PPTP, L2TP, VPN Client Pass Through
- Hub and Spoke VPN Support
- IKE Certificate Authentication (v1 & v2)
- IPSec NAT Traversal
- Automatic IPSec Configuration
- Dead Peer Detection
- RSA SecurID Support
- SSL Single Sign-On Bookmarks
- SSL Two-Factor Authentication
- LDAP Group Authentication (SSL)

NETWORKING/ROUTING

- Multiple WAN Link Support
- DHCP Client/Server
- Policy-Based Routing
- Dynamic Routing for IPv4 and IPv6 (RIP, OSPF, BGP, & Multicast for IPv4)
- Multi-Zone Support
- Route Between Zones
- Route Between Virtual LANs (VDOMS)
- Multi-Link Aggregation (802.3ad)
- IPv6 Support (Firewall, DNS, Transparent Mode, SIP, Dynamic Routing, Admin Access, Management)
- VRPP and Link Failure Control
- sFlow Client

USER AUTHENTICATION OPTIONS

- Local Database
- Windows Active Directory (AD) Integration
- External RADIUS/LDAP Integration
- Xauth over RADIUS for IPSEC VPN
- RSA SecurID Support
- LDAP Group Support

DATA CENTER OPTIMIZATION

- Web Server Caching
- TCP Multiplexing
- HTTPS Offloading
- WCCP Support

ANTIVIRUS / ANTISPYWARE

- ICSA Labs Certified (Gateway Antivirus)
- Includes Antispyware and Worm Prevention:
- HTTP/HTTPS SMTP/SMTSP
- POP3/POP3S IMAP/IMAPS
- FTP IM Protocols
- Flow-Based Antivirus Scanning Mode
- Automatic "Push" Content Updates
- File Quarantine Support
- Databases: Standard, Extended, Extreme, Flow
- IPv6 Support

WEB FILTERING

- 76 Unique Categories
- FortiGuard Web Filtering Service Categorizes over 2 Billion Web pages
- HTTP/HTTPS Filtering
- Web Filtering Time-Based Quota
- URL/Keyword/Phrase Block
- URL Exempt List
- Content Profiles
- Blocks Java Applet, Cookies, Active X
- MIME Content Header Filtering
- IPv6 Support

APPLICATION CONTROL

- Identify and Control Over 1400 Applications
- Control Popular IM/P2P Apps Regardless of Port/Protocol:
- AOL-IM Yahoo MSN KaZaa
- ICQ Gnutella BitTorrent MySpace
- WinNY Skype eDonkey Facebook

HIGH AVAILABILITY (HA)

- Active-Active, Active-Passive
- Stateful Failover (FW and VPN)
- Device Failure Detection and Notification
- Link Status Monitor
- Link failover
- Server Load Balancing

WAN OPTIMIZATION

- Bi-directional / Gateway to Client/Gateway
- Integrated Caching and Protocol Optimization
- Accelerates CIFS/FTP/MAPI/HTTP/HTTPS/Generic TCP

VIRTUAL DOMAINS (VDOMS)

- Separate Firewall/Router Domains
- Separate Administrative Domains
- Separate VLAN Interfaces
- 10 VDOM License Std. (more can be added)

WIRELESS CONTROLLER

- Unified WiFi and Access Point Management
- Automatic Provisioning of APs
- On-wire Detection and Blocking of Rogue APs
- Virtual APs with Different SSIDs
- Multiple Authentication Methods

TRAFFIC SHAPING

- Policy-based Traffic Shaping
- Application-based and Per-IP Traffic Shaping
- Differentiated Services (DiffServ) Support
- Guarantee/Max/Priority Bandwidth
- Shaping via Accounting, Traffic Quotas

INTRUSION PREVENTION SYSTEM (IPS)

- ICSA Labs Certified (NIPS)
- Protection From Over 3000 Threats
- Protocol Anomaly Support
- Custom Signature Support
- Automatic Attack Database Update
- IPv6 Support

DATA LOSS PREVENTION (DLP)

- Identification and Control Over Sensitive Data in Motion
- Built-in Pattern Database
- RegEx-based Matching Engine for Customized Patterns
- Configurable Actions (block/log)
- Supports IM, HTTP/HTTPS, and More
- Many Popular File Types Supported
- International Character Sets Supported

ANTISPAM

- Support for SMTP/SMTSP, POP3/POP3S, IMAP/IMAPS
- Real-Time Blacklist/Open Relay Database Server
- MIME Header Check
- Keyword/Phrase Filtering
- IP Address Blacklist/Exempt List
- Automatic Real-Time Updates From FortiGuard Network

ENDPOINT COMPLIANCE AND CONTROL

- Monitor & Control Hosts Running FortiClient Endpoint Security

MANAGEMENT/ADMINISTRATION

- Console Interface (RS-232)
- WebUI (HTTP/HTTPS)
- Telnet / Secure Command Shell (SSH)
- Command Line Interface
- Role-Based Administration
- Multi-language Support: English, Japanese, Korean, Spanish, Chinese (Simplified & Traditional), French
- Multiple Administrators and User Levels
- Upgrades and Changes via TFTP and WebUI
- System Software Rollback
- Configurable Password Policy
- Optional FortiManager Central Management

LOGGING/MONITORING/VULNERABILITY

- Local Event Logging
- Log to Remote Syslog/WELF Server
- Graphical Real-Time and Historical Monitoring
- SNMP Support
- Email Notification of Viruses And Attacks
- VPN Tunnel Monitor
- Optional FortiAnalyzer Logging / Reporting
- Optional FortiGuard Analysis and Management Service

Firewall

Fortinet firewall technology delivers complete content and network protection by combining stateful inspection with a comprehensive suite of powerful security features. Application control, antivirus, IPS, Web filtering and VPN, along with advanced features such as an extreme threat database, vulnerability management, flow-based inspection and active profiling work in concert to identify and mitigate the latest complex security threats. The security-hardened FortiOS operating system works together with purpose-built FortiASIC processors to accelerate inspection throughput and identification of malware.

Features

- NAT, PAT and Transparent (Bridge)
- Policy-Based NAT
- SIP/H.323/SCCP NAT Traversal
- VLAN Tagging (802.1Q)
- Vulnerability Management
- IPv6 Support

Throughput	FG-3040B	FG-3140B
1518 Byte Packets	40 Gbps	58 Gbps
512 Byte Packets	40 Gbps	55 Gbps
64 Byte Packets	40 Gbps	43 Gbps

Antivirus / Antispyware

Antivirus content inspection technology protects against viruses, spyware, worms, and other forms of malware which can infect network infrastructure and endpoint devices. By intercepting and inspecting application-based traffic and content, antivirus protection ensures that malicious threats hidden within legitimate application content are identified and removed from data streams before they can cause damage. FortiGuard subscription services ensure that FortiGate devices are updated with the latest malware signatures for high levels of detection and mitigation.

Features

- Automatic Database Updates
- Proxy-based Antivirus
- Flow-based Antivirus
- File Quarantine
- IPv6 Support

Throughput	FG-3040B	FG-3140B
Antivirus	1.2 Gbps	1.2 Gbps

Intrusion Prevention

IPS technology protects against current and emerging network-level threats. In addition to signature-based threat detection, IPS performs anomaly-based detection which alerts users to any traffic that matches attack behavior profiles. The Fortinet threat research team analyzes suspicious behavior, identifies and classifies emerging threats, and generate new signatures to include with FortiGuard Service updates.

Features

- Automatic Database Updates
- Protocol Anomaly Support
- IPS and DoS Prevention Sensor
- Custom Signature Support
- IPv6 Support

Throughput	FG-3040B	FG-3140B
IPS	6 Gbps	7 Gbps

VPN

Fortinet VPN technology provides secure communications between multiple networks and hosts, using SSL and IPsec VPN technologies. Both services leverage our custom FortiASIC processors to provide acceleration in the encryption and decryption steps. The FortiGate VPN service enforces complete content inspection and multi-threat protections including antivirus, intrusion prevention and Web filtering. Traffic optimization provides prioritization for critical communications traversing VPN tunnels.

Features

- IPSec and SSL VPN
- DES, 3DES, AES and SHA-1/MD5 Authentication
- PPTP, L2TP, VPN Client Pass Through
- SSL Single Sign-On Bookmarks
- Two-Factor Authentication

Performance	FG-3040B	FG-3140B
IPSec VPN Throughput	17 Gbps	22 Gbps
SSL VPN Throughput	500 Mbps	500 Mbps
Maximum SSL VPN Users Recommended	22,000	22,000

WAN Optimization

Wide Area Network (WAN) optimization accelerates applications over geographically dispersed networks, while ensuring multi-threat inspection of all network traffic. WAN optimization eliminates unnecessary and malicious traffic, optimizes legitimate traffic, and reduces the amount of bandwidth required to transmit data between applications and servers. Improved application performance and delivery of network services reduces bandwidth and infrastructure requirements, along with associated expenditures.

Features

- Gateway-to-Gateway Optimization
- Bidirectional Gateway-to-client Optimization
- Web Caching
- Secure Tunnel
- Transparent Mode

Endpoint NAC

Endpoint NAC can enforce the use of FortiClient Endpoint Security for users connecting to corporate networks. Endpoint NAC verifies FortiClient Endpoint Security installation, firewall operation and up-to-date antivirus signatures before allowing network access. Non-compliant endpoints, such as endpoints running applications that violate security policies can be quarantined or sent to remediation.

Features

- Monitor & Control Hosts Running FortiClient
- Vulnerability Scanning of Network Nodes
- Quarantine Portal
- Application Detection and Control
- Built-in Application Database

Web Filtering

Web filtering protects endpoints, networks and sensitive information against Web-based threats by preventing users from accessing known phishing sites and sources of malware. In addition, administrators can enforce policies based on Website categories to easily prevent users from accessing inappropriate content and logging networks with unwanted traffic.

Features

- HTTP/HTTPS Filtering
- URL / Keyword / Phrase Block
- Blocks Java Applet, Cookies or Active X
- MIME Content Header Filtering
- Flow-based Web Filtering
- IPv6 Support

SSL-Encrypted Traffic Inspection

SSL-encrypted traffic inspection protects endpoint clients and Web and application servers from hidden threats. SSL Inspection intercepts encrypted traffic and inspects it for threats prior to routing it to its final destination. It can be applied to client-oriented SSL traffic, such as users connecting to cloud-based CRM site, and to inbound Web and application server traffic. SSL inspection enables you to enforce appropriate use policies on encrypted Web content and to protect servers from threats which may be hidden inside encrypted traffic flows.

Features

- Protocol support:
HTTPS, SMTPS, POP3S, IMAPS
- Inspection support:
Antivirus, Web Filtering, Antispam, Data Loss Prevention, SSL Offload

Data Loss Prevention

DLP uses a sophisticated pattern-matching engine to identify and prevent the transfer of sensitive information outside of your network perimeter, even when applications encrypt their communications. In addition to protecting your organization's critical data, Fortinet DLP provides audit trails to aid in policy compliance. You can select from a wide range of configurable actions to log, block, and archive data, and quarantine or ban users.

Features

- Identification and Control Over Data in Motion
- Built-in Pattern Database
- RegEx Based Matching Engine
- Common File Format Inspection
- International Character Sets Supported
- Flow-based DLP

Logging, Reporting & Monitoring

FortiGate consolidated security appliances provide extensive logging capabilities for traffic, system, and network protection functions. They also allow you to assemble drill-down and graphical reports from detailed log information. Reports can provide historical and current analysis of network activity to aid with identification of security issues and to prevent network misuse and abuse.

Features

- Internal Log storage and Report Generation
- Graphical Real-Time and Historical Monitoring
- Graphical Report Scheduling Support
- Graphical Drill-down Charts
- Optional FortiAnalyzer Logging (including per VDOM)
- Optional FortiGuard Analysis and Management Service

High Availability

High Availability (HA) configurations enhance reliability and increase performance by clustering multiple FortiGate appliances into a single entity. FortiGate High Availability supports Active-Active and Active-Passive options to provide maximum flexibility for utilizing each member within the HA cluster. The HA feature is included as part of the FortiOS operation system and is available with most FortiGate appliances.

Features

- Active-Active and Active-Passive
- Stateful Failover (FW and VPN)
- Link State Monitor and Failover
- Device Failure Detection and Notification
- Server Load Balancing

Virtual Domains

Virtual Domains (VDOMs) enable a single FortiGate system to function as multiple independent virtual FortiGate systems. Each VDOM contains its own virtual interfaces, security profiles, routing table, administration, and many other features. FortiGate VDOMs reduce the complexity of securing disparate networks by virtualizing security resources on the FortiGate platform, greatly reducing the power and footprint required as compared to multiple point products. Ideal for large enterprise and managed service providers.

Features

- Separate Firewall / Routing Domains
- Separate Administrative Domains
- Separate VLAN Interfaces
- Maximum VDOMs: 250
- Default VDOMs: 10

Wireless Controller

All FortiGate and FortiWiFi™ consolidated security platforms have an integrated wireless controller, enabling centralized management of FortiAP™ secure access points and wireless LANs. Unauthorized wireless traffic is blocked, while allowed traffic is subject to identity-aware firewall policies and multi-threat security inspection. From a single console you can control network access, update security policies, and enable automatic identification and suppression of rogue access points.

Features

- Unified WiFi and Access Point Management
- Automatic Provisioning of APs
- On-wire Detection and Blocking of Rogue APs
- Supports Virtual APs with Different SSIDs
- Supports Multiple Authentication Methods

Application Control

Application control enables you to define and enforce policies for thousands of applications running across networks regardless of port or the protocol used for communication. The explosion of new Internet-based and Web 2.0 applications bombarding networks today make application control essential, as most application traffic looks like normal Web traffic to traditional firewalls. Fortinet application control provides granular control of applications along with traffic shaping capabilities and flow-based inspection options.

Features

- Identify and Control Over 1,400 Applications
- Traffic Shaping (Per Application)
- Control Popular Apps Regardless of Port or Protocol
- Popular Applications include:
 - AOL-IM
 - Yahoo
 - MSN
 - KaZaa
 - ICQ
 - Gnutella
 - BitTorrent
 - MySpace
 - WinNY
 - Skype
 - eDonkey
 - Facebook
- and more

Setup / Configuration Options

Fortinet provides administrators with a variety of methods and wizards for configuring FortiGate appliances during deployment. From the easy-to-use Web-based interface to the advanced capabilities of the command-line interface, FortiGate systems offer the flexibility and simplicity you need.

Features

- Web-based User Interface
- Command Line Interface Over Serial Connection
- Pre-configured Settings from USB Drive

Technical Specifications	FortiGate-3040B	FortiGate-3140B
Interfaces and Modules		
Total Network Interfaces	20	22
Hardware Accelerated 10-GbE SFP+ Interfaces	8	10
Hardware Accelerated 1-GbE SFP Interfaces	10	
Non-Accelerated 10/100/1000 Interfaces	2	
Transceivers Included	2x SR SFP+	
Fortinet Storage Module (FSM) Expansion Slots (Total)	4	
Local Solid State Disk Storage Included	64 GB SSD (1x FSM-064)	
USB Server	2	
RJ45 Serial Console	1	
System Performance		
Firewall Throughput (1518 byte UDP packets)	40 Gbps	58 Gbps
Firewall Throughput (512 byte UDP packets)	40 Gbps	55 Gbps
Firewall Throughput (64 byte UDP packets)	40 Gbps	43 Gbps
IPSec VPN Throughput (AES-256+SHA1)	17 Gbps	22 Gbps
IPS Throughput	6 Gbps	7 Gbps
Antivirus Throughput	1.2 Gbps	
Static IPSec VPN Tunnels (System / VDOM)	10,000 / 5,000	
Concurrent IPSec VPN Tunnels	64,000	
Concurrent Sessions	4.0 Million	
New Sessions/Sec	100,000	
Concurrent SSL-VPN Users (Recommended Max)	22,000	
SSL VPN Throughput	500 Mbps	
Firewall Policies (VDOM/System)	50,000 / 100,000	
Virtual Domains (Max / Default)	250 / 10	
Wireless Access Points Controlled	1,024	
Unlimited User Licenses	Yes	
Redundant Power Supplies (Hot Swappable)	Yes	
Dimensions		
Height	3.46 in (88 mm)	
Width	17.40 in (442 mm)	
Length	21.85 in (555 mm)	
Weight	35 lb (15.9 kg)	41 lb (18.6 kg)
Rack Mountable	Yes	
Environment		
Power Source	100 - 240 VAC, 50-60 Hz	
Current (Max)	3.50A /110V, 1.75A /220V	4.18A /110V, 2.09A /220V
Power Consumption (Avg)	315 W	383 W
Power Consumption (Max)	378 W	460 W
Heat Dissipation	1290 BTU/h	1570 BTU/h
Operating Temperature	32 – 104 deg F (0 – 40 deg C)	
Storage Temperature	-31 – 158 deg F (-35 – 70 deg C)	
Humidity	20 to 90% non-condensing	
Compliance		
Regulatory Compliance	FCC Class A Part 15, UL/CUL, C Tick, VCCI	

FortiGate-3040B/3140B consolidated security appliances also include:

- Multiple deployment modes (Transparent/Routing) for ease of installation
- Integrated Switch Fabric for very low latency
- Advanced Layer-2/3 routing for data center traffic optimization
- High Availability (Active/Active, Active/Passive, Clustering) for maximum uptime
- Virtual Domains (VDOMs) for multi-tenant environments
- Traffic Shaping and Prioritization ensure performance of critical traffic
- WAN Optimization and Web Caching for improved performance and lower costs
- Local event logging and reporting for compliance and auditing

MANAGEMENT OPTIONS

- Local Web-Based Management Interface
- Command Line Management Interface (CLI)
- Centralized management and analysis by FortiManager and FortiAnalyzer

Actual performance values may vary depending on the network traffic and system configuration. Firewall performance is based on 64, 512 and 1518 Byte UDP packets processed with the FortiGate-3040B/3140B appliance operating in NAT mode. VPN performance is based on 512 Byte UDP packets processed with the FortiGate-3040B/3140B appliance using AES-256+SHA1 encryption algorithms. Antivirus performance is measured using HTTP traffic with 32 KB file attachments and the FortiGate-3040B/3140B configured to use the regular antivirus database. IPS performance is measured base on NSS like test methodology with 44K HTTP files.

Ordering Info		SKU
Product Description		
FortiGate-3040B, 8 SFP+ 10-Gig ports (2 SFR+ SR-type transceivers included), 10 SFP 10/100/1000 FortiASIC accelerated ports, 2 SFP 10/100/1000 ports, 4 FSM Slots, 1 FSM-064 with 64 GB SSD storage, and dual AC power supplies		FG-3040B
FortiGate-3140B, 10 SFP+ 10-Gig ports (2 SFR+ SR-type transceivers included), 10 SFP 10/100/1000 FortiASIC accelerated ports, 2 SFP 10/100/1000 ports, 4 FSM Slots, 1 FSM-064 with 64 GB SSD storage, and dual AC power supplies		FG-3140B
Optional Accessories		SKU
Fortinet Storage Module (FSM), 64 GB Solid State Drive for FortiGate with FSM slot		FSM-064
10-Gig transceiver, Short Range SFP+ module for all FortiGate models with SFP+ interfaces		FG-TRAN-SFP+SR
10-Gig transceiver, Long Range SFP+ module for all FortiGate models with SFP+ interfaces		FG-TRAN-SFP+LR

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
300 Beach Road #20-01 The Concourse,
Singapore 199555
Tel +65-6513-3734
Fax +65-6295-0015



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