

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

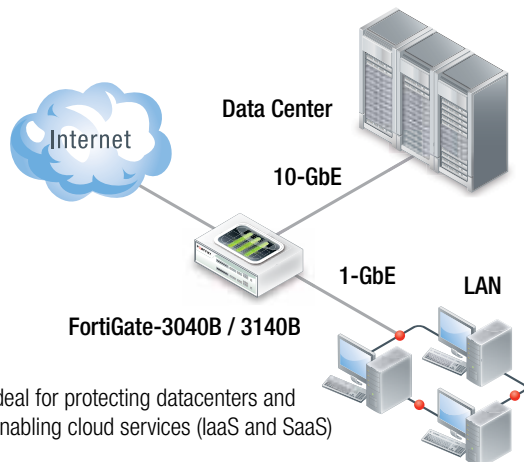
You can protect your data center and other high-bandwidth applications with the 10-GbE interfaces that ship standard on the FortiGate-3040B/3140B appliances. Each platform includes system ports supporting SFP+, SFP, and RJ-45 connections, providing maximum flexibility.

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
- 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



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 (Proxy-based)	2.3 Gbps	2.3 Gbps
Antivirus (Flow-based)	4.5 Gbps	5.7 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	8.4 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	1.6 Gbps	1.6 Gbps
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 1,800 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
Hardware		
Total Network Interfaces	20	22
Hardware Accelerated 10-GbE SFP+ Interfaces	8	10
Hardware Accelerated 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 / 512 / 64 byte UDP packets)	40 / 40 / 40 Gbps	58 / 55 / 43 Gbps
Firewall Latency (64 byte UDP packets)	4 µs	4 µs
Firewall Throughput (Packets Per Second)	60 Mpps	65 Mpps
Concurrent Sessions (TCP)	10 Million	
New Sessions/Sec (TCP)	200,000	
Firewall Policies	100,000	
IPSec VPN Throughput (512 byte packets)	17 Gbps	22 Gbps
Gateway-to-Gateway IPSec VPN Tunnels	10,000	
Client-to-Gateway IPSec VPN Tunnels	64,000	
SSL-VPN Throughput	1.6 Gbps	
Concurrent SSL-VPN Users (Recommended Max)	22,000	
IPS Throughput	6 Gbps	8.4 Gbps
Antivirus Throughput (Proxy Based / Flow Based)	2.3 / 4.5 Gbps	2.3 / 5.7 Gbps
Virtual Domains (Default / Max)	10 / 250	
Max Number of FortiAPs	1,024	
Max Number of FortiTokens	5,000	
Max Number of Registered FortiClients	8,000	
High Availability Configurations	Active/Active, Active/Passive, Clustering	
Unlimited User Licenses	Yes	
Dimensions and Power		
Height x Width x Length	3.46 x 17.40 x 21.85 in (8.8 x 44.2 x 55.5 cm)	
Weight	35 lb (15.9 kg)	41 lb (18.6 kg)
Rack Mountable	Yes	
AC Power Supply	100 - 240 VAC, 50-60 Hz, 3.50-1.75 A (Max)	100 - 240 VAC, 50-60 Hz, 4.18-2.09 A (Max)
Power Consumption (Avg / Max)	315 / 378 W	383 / 460 W
Heat Dissipation	1290 BTU/h	1570 BTU/h
DC Power Supply (FG-3040B-DC / FG-3140B-DC)	-48V VDC	
Redundant Power Supplies (Hot Swappable)	Yes	
Operating Environment and Certifications		
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	FCC Part 15 Class A, C-Tick, VCCI, CE, UL/cUL, CB	
Certifications	ICSA Labs: Firewall, IPSec, IPS, Antivirus, SSL VPN	

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 (VDMs) 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

Note: All performance values are "up to" and vary depending on system configuration. Antivirus performance is measured using 44 Kbyte HTTP files. IPS performance is measured using 1 Mbyte HTTP files.

Ordering Info	
Product	SKU
FortiGate-3040B	FG-3040B
FortiGate-3140B	FG-3140B
FortiGate-3040B-DC	FG-3040B-DC
FortiGate-3140B-DC	FG-3140B-DC
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

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