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DATASHEET

FortiGate®-310B/-311B

ASIC-Powered Security at Switching Speeds

The evolution of network security threats has driven the expansion of security products to include multiple threat recognition systems within a single appliance. Unified Threat Management systems from Fortinet include firewall, VPN, intrusion prevention, antivirus, antimalware, antispam and web content filtering to identify numerous types of threats from a single device. While the ease of use of UTM products has created a prolific adoption trend, administrators still struggle with limited physical deployment options due to the available throughput and port density of mid-range devices.

The Power of Network Segmentation

The FortiGate-310B/-311B series appliances answer the call of growing enterprise networks by integrating a purpose-built security processing ASIC, known as the FortiASIC Network Processor, into the FortiGate system to deliver security throughput at switching speeds. Eight hardware accelerated interfaces (expandable to 12) allow networks to enforce firewall policy between network segmentation points for layered security with switch-like performance. An additional purpose-built ASIC, known as the FortiASIC Content Processor, provides additional acceleration for content intensive security technologies such as intrusion prevention and antivirus scanning. The inclusion of modular expansion slots allow for even more flexibility, offering additional ASIC-accelerated ports for additional throughput or disk-based storage for local logging and content archiving. With numerous accelerated multi-threat security interfaces, organizations can create multiple security zones for various departments, users, access methods, and even devices to enforce network security at accelerated speeds.

FortiGate Multi-Threat Security Solutions

Fortinet's multi-layered security solutions efficiently and economically provide an integrated set of security services in a single, easy-to-manage high-performance appliance that is capable of supporting a wide range of deployment scenarios. In addition, FortiGuard Subscription Services include everything from technical support, antivirus updates, antispyware, antispam, and Web content filtering to ensure that your security environment remains current and your corporate resources are protected against the latest blended threats. Finally, FortiGate systems come with a one-year limited hardware warranty and 90-day limited software warranty.

FortiOS 4.0 Software Redefines Networks Security

FortiOS 4.0 is a purpose-built operating system that leverages the power of specialized FortiASIC hardware to offer increased levels of security and performance. Fortinet developed FortiOS 4.0 software solely for the FortiGate multi-threat security platform. FortiOS software enables a comprehensive suite of security services – firewall, VPN, intrusion prevention, antimalware, antispam, web filtering, application control, data loss prevention, vulnerability management, and end point network access control.

The FortiASIC Advantage

FortiASIC processors power FortiGate platforms. With exclusive hardware, the purpose built, high-performance network, security, and content processors use intelligent and proprietary digital engines to accelerate resource-intensive security services.

Challenge	Solution
Voice, video, and other time-sensitive applications require extremely low-latency during transit	FortiGate-310B/-311B series appliances ensure that security is never a bottleneck, thanks to the FortiASIC network processor which provides microsecond latency, up to 12 Gbps firewall performance, and up to 9 Gbps IPSec VPN performance.
Many security devices have a limited number of ports, preventing desired internal network segmentation	The FortiGate-300 series appliances come standard with ten (10) 10/100/1000 interfaces (expandable to 14 interfaces), to permit a wide-array of deployments.
Most security devices have limited expansion capabilities	The FortiGate-300 series feature modular expansion bays extend the base system with additional security processing, accelerated interface, bypass, or wide area network modules.
To obtain effective protection from threats, it's necessary to cobble multiple products together to form a solution	Fortinet combines firewall, VPN, intrusion prevention, antivirus, antispam, web filtering, data leakage prevention, application control, and more into a single platform, providing an effective all-in-one solution.

Technical Specifications	FG-310B	FG-311B
HARDWARE SPECIFICATIONS		
Total 10/100/1000 Interfaces (RJ-45)	10	
Maximum Network Interfaces (With Optional Module)	14	
AMC Expansion Slot	1 Single Width	
Fortinet Storage Module (FSM) Slots	N/A	2
Local Storage Included (via ASM-S08 for FG-310B, FSM-064 included with FG-311B)	N/A	64 GB SSD
SYSTEM PERFORMANCE		
Firewall Throughput (1518 byte UDP packets)	8 Gbps	
Firewall Throughput (64 byte UDP packets)	8 Gbps	
IPSec VPN Throughput	6 Gbps	
IPS Throughput	800 Mbps	
Antivirus Throughput	160 Mbps	
Gateway-to-Gateway IPSec VPN Tunnels (System / VDOM)	6,000 / 3,000	
Client-to-Gateway IPSec VPN Tunnels	3,000	
SSL-VPN Users (Recommended Max)	300	
SSL-VPN Throughput	200 Mbsp	
Concurrent Sessions (TCP)	600,000	
New Sessions/Sec (TCP)	20,000	
Policies (Max)	8,000	
Unlimited User Licenses	Yes	
Virtual Domains (VDOMs)	10	
High Availability Configurations	Active/Active, Active/Passive, Clustering	
DIMENSIONS		
Height / Width	1.75 in (4.55 cm)	
Width	17 in (43.18 cm)	
Length (FG-310B / FG-311B)	12.6 in (32 cm) / 16 in (40.65cm)	
Weight (FG-310B / FG-311B)	14 lb (6.35 kg) / 14.5 lb (6.58 kg)	
Rack Mountable	Yes	
AC Power (FG-310B / FG-311B)	100 - 240 VAC, 60 - 50 Hz, 5 - 3 Amp (Max)	
DC Power (FG-310B-DC Only)	-48V DC (Normal)	
Power Consumption (AVG) (FG-310B / FG-311B)	136 W / 124 W	
Heat Dissipation (FG-310B / FG-311B)	465 BTU / 443 BTU	
Redundant Power Supplies	Requires External Option (FG-310B) / Included (FG-311B)	
ENVIRONMENT		
Operating temperature	32 to 104 deg F (0 - 40 deg C)	
Storage temperature	-13 to 158 deg F (-25 to 70 deg C)	
Humidity	5 to 90% non-condensing	
Compliance	FCC Class A Part 15, UL/CUL, CE, C Tick, VCCI	
Certifications	ICSA Labs: Firewall, IPSec VPN, SSL VPN, IPS, Antivirus	

Fortinet AMC Expansion Modules

Accelerated Interface Modules

The Fortinet ASM-FB4 accelerated interface module adds incremental hardware accelerated network interfaces to FortiGate platforms for wire-speed firewall performance and near wire-speed IPSec VPN performance. Up to 12 Gbps aggregate firewall throughput and up to 9 Gbps aggregate VPN throughput is possible with the FG-300 series when using the optional ASM-FB4 Fortinet Accelerated Interface Module.

Bypass Modules

Fortinet ASM-CX4 and ASM-FX2 modules provide bypass functionality to FortiGate platforms, automatically bridging network traffic in the event of a system or power failure.

T1/E1 WAN Module

The Fortinet ASM-ET4 module provides Wide Area Network (WAN) connectivity to FortiGate platforms, with support for T1 and E1 network circuits.

Storage Modules

Fortinet storage modules provide localized storage facilities to FortiGate platforms, with support for builtin and external storage systems.

See the applicable AMC Expansion Module datasheet for more information about Fortinet AMC Expansion Options.

FortiGate-310B External Redundant Power Supply Option

Part Number	FG-310B-RPS
Number of FG-310B Devices Supported	1
DIMENSIONS	
Height	1.74 in (4.41 cm)
Width	17.4 in (44.2 cm)
Length	11.85 in (30.1 cm)
Rack Mountable	No
Power Required	100 - 240 VAC, 60 - 50 Hz, 8 - 5 Amp (Max)
ENVIRONMENT	
Operating temperature	32 to 104 deg F (0 - 40 deg C)
Storage temperature	-31 to 158 deg F (-35 to 70 deg C)
Humidity	20 to 90% non-condensing
Compliance	FCC Class A Part 15, UL/CUL, CE, C Tick, VCCI

All performance values are "up to" and vary depending on system configuration
Antivirus performance is benchmarked using HTTP traffic (32 Kbyte Objects)
IPS performance is benchmarked using UDP traffic (512 byte packet size)

FortiGuard® Security Subscription Services deliver dynamic, automated updates for Fortinet products. The Fortinet Global Security Research Team creates these updates to ensure up-to-date protection against sophisticated threats. Subscriptions include antivirus, intrusion prevention, web filtering, antispam, vulnerability and compliance management, application control, and database security services.

FortiCare™ Support Services provide global support for all Fortinet products and services. FortiCare support enables your Fortinet products to perform optimally. Support plans start with 8x5 Enhanced Support with "return and replace" hardware replacement or 24x7 Comprehensive Support with advanced replacement. Options include Premium Support, Premium RMA, and Professional Services. All hardware products include a 1-year limited hardware warranty and 90-day limited software warranty.

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