





#### FortiGate® 3100D

High Performance Data Center Firewall with 10 GE Interfaces



# FortiGate 3100D

FG-3100D and 3100D-DC

Today's data centers require security appliances that deliver exceptional performance, deployment flexibility and extensive security features, to protect the most demanding network environments. The FortiGate 3100D device is ideally suited for network segmentation and internal network threat protection in data centers with its 32 10 GE interfaces.

#### 10 Times Data Center Firewall Performance

The FortiGate 3100D appliance provides up to 80 Gbps of firewall throughput through the use of innovative FortiASIC processors and the latest generation of multi-core 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.

#### Future-proof Security

The system also provides technologies that include robust networking capabilities and extensible security features, all managed from an intuitive management console with deep insight offerings, enabling you to keep pace with your evolving network.

## Features & Benefits

- Industry-leading 10x data center firewall offers exceptional throughput and ultra-low latency
- Highly available and Virtual Domain (VDOM) support for multi-tenant data center environment
- Integrated high-speed 10 GE+ port delivers maximum flexibility and scalability
- Intuitive management interface enables broad and deep visibility and control
- NSS Labs Recommended consolidated security delivers top-rated protection

## Highlights

Firewall Performance	IPS Performance	Interfaces
80 Gbps	14 Gbps	Multiple 10 GE SFP+, GE SFP and GE RJ45









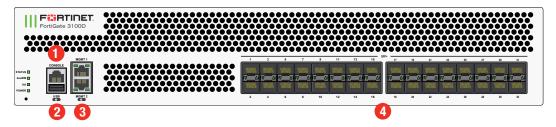






## **HARDWARE**

#### FortiGate 3100D







#### Interfaces

- 1. Console Port
- 2. USB Management Port

- 3. 2x GE RJ45 Management Ports
- 4. 32x 10G SFP+/GE SFP Slots



## Powered by FortiASICs

- Custom FortiASIC<sup>™</sup> processors deliver the power you need to detect malicious content at multi-Gigabit speeds
- Other security technologies cannot protect against today's wide range of content- and connection-based threats because they rely on general-purpose CPUs, causing a dangerous performance gap
- FortiASIC processors provide the performance needed to block emerging threats, meet rigorous third-party certifications, and ensure that your network security solution does not become a network bottleneck

#### **Network Processor**

Fortinet's new, breakthrough FortiASIC NP6 network processor works inline with FortiOS functions delivering:

- Superior firewall performance for IPv4/IPv6, SCTP and multicast traffic with ultra-low latency down to 2 microseconds
- VPN, CAPWAP and IP tunnel acceleration
- Anomaly-based intrusion prevention, checksum offload and packet defragmentation
- Traffic shaping and priority queuing

## **Content Processor**

The FortiASIC CP8 content processor works outside of the direct flow of traffic, providing high-speed cryptography and content inspection services including:

- Signature-based content inspection acceleration
- Encryption and decryption offloading

#### 10 GE Connectivity for Network Segmentation

High speed connectivity is essential for network security segmentation at the core of data networks. The FortiGate 3100D provides the highest 10 GE port densities in the market, simplifying network designs without relying on additional devices to bridge desired connectivity.

2 www.fortinet.com

## **SOFTWARE**



FortiOS Managment UI — FortiView and Application Control Panel

#### **FortiOS**

FortiOS helps you protect your organization against advanced threats, configure and deploy your network security faster and see deep into what's happening inside your network. It enables organization to set up policies specific to types of devices, users and applications with industry-leading security capabilities. FortiOS leverages custom FortiASICs and the Optimum Path Processing architecture of FortiGate to deliver 5 times faster throughput performance. In essence, FortiOS delivers:

- Comprehensive Security Control thousands of applications and stop more threats with NSS Labs Recommended IPS, sandboxing, VB100 certified antimalware and more.
- Superior Control and Visibility Stay in control with rich
  visibility over network traffic, granular policy control, and intuitive,
  scalable security and network management.
- Robust Networking Capabilities Optimize your network with extensive switching and routing, high availability, WAN optimization, embedded WiFi controller, and a range of virtual options.



For more information, please refer to the FortiOS data sheet available at www.fortinet.com

## **SERVICES**

## FortiGuard™ Security Services

FortiGuard Labs offers real-time intelligence on the threat landscape, delivering comprehensive security updates across the full range of Fortinet's solutions. Comprised of security threat researchers, engineers, and forensic specialists, the team collaborates with the world's leading threat monitoring organizations, other network and security vendors, as well as law enforcement agencies:

- Real-time Updates 24x7x365 Global Operations research security intelligence, distributed via Fortinet Distributed Network to all Fortinet platforms.
- Security Research FortiGuard Labs have discovered over 170 unique zero-day vulnerabilities to date, totaling millions of automated signature updates monthly.
- Validated Security Intelligence Based on FortiGuard intelligence, Fortinet's network security platform is tested and validated by the world's leading third-party testing labs and customers globally.



For more information, please refer to http://forti.net/guard

## FortiCare<sup>™</sup> Support Services

Our FortiCare customer support team provides global technical support for all Fortinet products. With support staff in the Americas, Europe, Middle East and Asia, FortiCare offers services to meet the needs of enterprises of all sizes:

- Enhanced Support For customers who need support during local business hours only.
- Comprehensive Support For customers who need aroundthe-clock mission critical support, including advanced exchange hardware replacement.
- Premium Services For global or regional customers who need an assigned Technical Account Manager, enhanced service level agreements, extended software support, priority escalation, on-site visits and more.
- Professional Services For customers with more complex security implementations that require architecture and design services, implementation and deployment services, operational services and more.



For more information, please refer to http://forti.net/care

## **SPECIFICATIONS**

	FORTIGATE 3100D
Interfaces and Modules	
10 GE SFP+ / GE SFP Slots	32
GE RJ45 Management Ports	2
USB Ports (Client / Server)	1/1
Console Port	1
Internal Storage	480 GB
Included Transceivers	2x SFP+ (SR 10 GE)
System Performance and Capacity	
Firewall Throughput (1518 / 512 / 64 byte, UDP)	80 / 80 / 50 Gbps
IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP)	80 / 80 / 50 Gbps
Firewall Latency (64 byte, UDP)	3 µs
Firewall Throughput (Packet per Second)	75 Mpps
Concurrent Sessions (TCP)	50 Million
New Sessions/Second (TCP)	400,000
Firewall Policies	100,000
IPsec VPN Throughput (512 byte)	50 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	20,000
Client-to-Gateway IPsec VPN Tunnels	64,000
SSL-VPN Throughput	8 Gbps
Concurrent SSL-VPN Users (Recommended Maximum)	30,000
IPS Throughput	14 Gbps
Antivirus Throughput	5.7 Gbps
Virtual Domains (Default / Maximum)	10 / 500
Maximum Number of FortiAPs (Total / Tunnel Mode)	4,096 / 1,024
Maximum Number of FortiTokens	5,000
Maximum Number of Registered FortiClients	20,000
High Availability Configurations	Active/Active, Active/Passive, Clustering

	FORTIGATE 3100D
Dimensions amd Power	
Height x Width x Length (inches)	3.5 x 17.4 x 21.9
Height x Width x Length (mm)	88 x 442 x 555
Weight	37.69 lbs (17.1 kg)
Form Factor	2 RU
AC Power Supply	100-240V AC, 50-60 Hz
DC Power Supply (FG-3100D-DC)	40.5–57V DC
Power Consumption (Average / Maximum)	337 W / 520 W
Heat Dissipation	1775 BTU/h
Redundant Power Supplies	Yes, Hot Swappable
Operating Environment and Certifications	
Operating Temperature	32-104°F (0-40°C)
Storage Temperature	-31-158°F (-35-70°C)
Humidity	10-90% non-condensing
Operating Altitude	Up to 7.400 ft (2.250 m)
Compliance	FCC Part 15 Class A, C-Tick, VCCI, CE, UL/cUL, CB
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSI -VPN

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. IPsec VPN performance is based on 512 byte UDP packets using AES-256+SHA1. Antivirus Throughput is measured in proxy mode.

For complete, up-to-date and detailed feature set, please refer to the Administration Handbook and FortiOS Datasheet.

## ORDER INFORMATION

Product	SKU	Description
FortiGate 3100D	FG-3100D	32x 10 GE SFP+ slots 10G ports (2 SFP+ SR-type transceivers included), FortiASIC NP6 and CP8 hardware accelerated, 480 GB SSD internal storage, and dual AC power supplies.
FortiGate 3100D-DC	FG-3100D-DC	32x 10 GE SFP+ slots, 2x GE RJ45 Management, FortiASIC NP6 and CP8 hardware accelerated, 480 GB SSD onboard storage, and dual DC power supplies.
Optional Accessories		
Rack Mount Sliding Rails	SP-FG3040B-RAIL	Rack mount sliding rails for FG-1000C/-DC, FG-1200D, FG-1500D/-DC, FG-3040B/-DC, FG-3140B/-DC, FG-3240C/-DC, FG-3000D, FG-3100D, FG-3200D, 3700D/-DC, 3700DX, 3810D/-DC and 3950B/-DC.
10 GE SFP+ Transceiver Module, Short Range	FG-TRAN-SFP+SR	10 GE SFP+ transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Transceiver Module, Long Range	FG-TRAN-SFP+LR	10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.
1 GE SFP LX Transceiver Module	FG-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP RJ45 Transceiver Module	FG-TRAN-GC	1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP SX Transceiver Module	FG-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.
10 GE SFP+ Active Direct Attach Cable, 10m / 32.8 ft	SP-CABLE-ADASFP+	10 GE SFP+ active direct attach cable, 10m / 32.8 ft for all systems with SFP+ and SFP/SFP+ slots.
AC Power Supply	SP-FG3600C-PS	AC power supply for FG-3000D, FG-3100D, FG-3200D, FG-3600C and FG-3240C.
DC Power Supply	SP-FG1500D-DC-PS	DC power supply for FG-1500D-DC, FG-3000/3100/3200D-DC.



GLOBAL HEADQUARTERS Fortinet Inc. 899 Kifer Road Sunnyvale, CA 94086 United States Tel: +1.408.235.7700 www.fortinet.com/sales

EMEA SALES OFFICE 120 rue Albert Caquot 06560, Sophia Antipolis, France Tel: +33.4.8987.0510

APAC SALES OFFICE 300 Beach Road 20-01 The Concourse Singapore 199555 Tel: +65.6513.3730

LATIN AMERICA SALES OFFICE Prol. Paseo de la Reforma 115 Int. 702 Col. Lomas de Santa Fe, C.P. 01219 Del. Alvaro Obregón México D.F. Tel: 011-52-(55) 5524-8480

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