



### FortiGate® 1000D

High Performance Data Center and Next Generation Firewall for the Enterprise



# FortiGate 1000D

Enterprises require a high-speed, high-capacity firewall to stay ahead of ever-increasing network performance requirements as well as continued evolution of the threat landscape, at data center and campus locations.

### Eliminate Security Bottlenecks

With 52 Gbps of firewall throughput and low latency, the FortiGate 1000D represents an excellent entry model for small data centers and delivers a high-performance, high-capacity data center firewall. IPv6 parity, 10 GE ports and dramatic increases in VPN performance enable you to keep pace with your evolving network.

#### Deeper Visibility

At the same time, 8 Gbps of next generation threat prevention performance allows you to run top-rated intrusion prevention, application control and antimalware capabilities for deeper inspection of content, applications, user and device activity. Rich console views and reports together with a flexible policy engine provide the visibility and control to empower employees yet secure your enterprise.

### Features & Benefits

- Industry-leading 5x next generation firewall performance and 10x data center firewall
- NSS Labs Recommended NGFW and NGIPS delivers top-rated protection
- Integrated high port density delivers maximum flexibility and scalability
- Intuitive management interface enables broad and deep visibility and control
- Application control plus identity and device-based policy enforcement provides more granular protection

## Highlights

| Firewall Performance | IPS Performance | Interfaces                              |
|----------------------|-----------------|---|
| 52 Gbps              | 8 Gbps          | Multiple 10 GE SFP+, GE SFP and GE RJ45 |







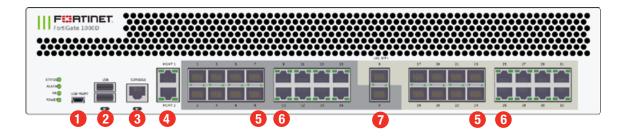


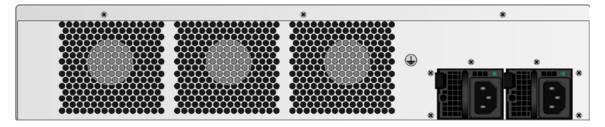






### **HARDWARE**







#### Interfaces

- 1. USB Management Port
- 2. USB Ports
- 3. Console Port
- 4. 2x GE RJ45 Management Ports

- 5. 16x GE SFP Slots
- 6. 16x GE RJ45 Ports
- 7. 2x 10 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 3 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

High speed connectivity is essential for network security segmentation. The FortiGate 1000D provides 10 GE slots that simplify 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**

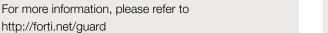
### FortiGuard™ Security Services

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/care



# 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.

### **SPECIFICATIONS**

|  | FORTIGATE 1000D                           |
|--|---|
| Interfaces and Modules                               |   |
| Hardware Accelerated 10 GE SFP+ Slots                | 2   |
| Hardware Accelerated GE SFP Slots                    | 16  |
| Hardware Accelerated GE RJ45 Ports                   | 16  |
| GE RJ45 Management / HA Ports                        | 2   |
| USB Ports (Client / Server)                          | 1/2                                       |
| Console Port   | 1   |
| Onboard Storage                                      | 256 GB                                    |
| Included Transceivers                                | 0   |
| System Performance and Capacity                      |   |
| IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP) | 52 / 52 / 33 Gbps                         |
| IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP) | 52 / 52 / 33 Gbps                         |
| Firewall Latency (64 byte, UDP)                      | 3 µs                                      |
| Firewall Throughput (Packet per Second)              | 49.5 Mpps                                 |
| Concurrent Sessions (TCP)                            | 11 Mil                                    |
| New Sessions/Second (TCP)                            | 280,000                                   |
| Firewall Policies                                    | 100,000                                   |
| IPsec VPN Throughput (512 byte)                      | 25 Gbps                                   |
| Gateway-to-Gateway IPsec VPN Tunnels                 | 20,000                                    |
| Client-to-Gateway IPsec VPN Tunnels                  | 50,000                                    |
| SSL-VPN Throughput                                   | 3.6 Gbps                                  |
| Concurrent SSL-VPN Users (Recommended Maximum)       | 10,000                                    |
| IPS Throughput                                       | 8 Gbps                                    |
| Antivirus Throughput                                 | 3.5 Gbps                                  |
| CAPWAP Clear-text Throughput (HTTP)                  | 10.5 Gbps                                 |
| Virtual Domains (Default / Maximum)                  | 10 / 250                                  |
| Maximum Number of FortiAPs (Total / Tunnel)          | 4,096 / 1,024                             |
| Maximum Number of FortiTokens                        | 5,000                                     |
| Maximum Number of Registered Endpoints               | 8,000                                     |
| High Availability Configurations                     | Active-Active, Active-Passive, Clustering |

|  | FORTICATE 1000R                                     |
|--|---|
|  | FORTIGATE 1000D                                     |
| Dimensions and Power                     |   |
| Height x Width x Length (inches)         | 3.48 x 17.20 x 17.95                                |
| Height x Width x Length (mm)             | 88.5 x 437 x 456                                    |
| Weight                                   | 24.70 lbs (11.20 kg)                                |
| Form Factor                              | Rack Mount, 2 RU                                    |
| AC Power Supply                          | 100–240V AC, 50–60 Hz                               |
| Power Consumption (Average / Maximum)    | 101 W / 122 W                                       |
| Current (Maximum)                        | 100V / 5A, 220V / 3A                                |
| Heat Dissipation                         | 415.19 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                                 | 20–90% 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, SSL-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. LAG support is limited to certain port configurations, please refer to technical documentation. 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 1000D                                      | FG-1000D         | 2x 10 GE SFP+ slots, 16x GE SFP slots, 16x GE RJ45 ports, 2x GE RJ45 Management ports, FortiASIC NP6 and CP8 hardware accelerated, 1x 256 GB SSD onboard storage, dual AC power supplies. |
| Optional Accessories/Spares                          | SKU              | Description   |
| 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+ Transceiver Module, Short Range           | FG-TRAN-SFP+SR   | 10 GE SFP+ transceiver module, long 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  |
| 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   |
| Ear Bracket for Rack Mounting, 2 RU                  | SP-EAR-FG1000D   | Ear bracket for rack mounting, 2 RU for FG-1000D  |
| AC Power Supply                                      | SP-FXX1000D      | AC power supply for FG-1000D and FXX-1000D  |



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