The FortiGate 1500D series delivers high performance threat protection and SSL inspection for large enterprises and service providers, with the flexibility to be deployed at the enterprise/cloud edge, in the data center core or internal segments. The multiple high-speed interfaces, high port density, superior security efficacy and high throughput of the 1500D series keeps your network connected and secure.

Security
- Identifies thousands of applications inside network traffic for deep inspection and granular policy enforcement
- Protects against malware, exploits, and malicious websites in both encrypted and non-encrypted traffic
- Prevent and detect against known and unknown attacks using continuous threat intelligence from AI powered FortiGuard Labs security services

Performance
- Delivers industry’s best threat protection performance and ultra-low latency using purpose-built security processor (SPU) technology
- Provides industry-leading performance and protection for SSL encrypted traffic

Certification
- Independently tested and validated best security effectiveness and performance
- Received unparalleled third-party certifications from NSS Labs

Network Routing
- Delivers advanced networking capabilities that seamlessly integrate with advanced layer 7 security and virtual domains (VDOMs) to offer extensive deployment flexibility, multi-tenancy and effective utilization of resources
- Delivers high-density, flexible combination of various high-speed interfaces to enable best TCO for customers for data center and WAN deployments

Management
- Includes management console that is effective, simple to use, and provides comprehensive network automation & visibility.
- Provides Zero Touch Integration with Security Fabric’s Single Pane of Glass Management
- Predefined compliance checklist analyzes the deployment and highlights best practices to improve overall security posture

Security Fabric
- Enables Fortinet and Fabric-ready partners’ products to provide broader visibility, integrated end-to-end detection, threat intelligence sharing and automated remediation

<table>
<thead>
<tr>
<th>Firewall</th>
<th>IPS</th>
<th>NGFW</th>
<th>Threat Protection</th>
<th>Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 Gbps</td>
<td>13 Gbps</td>
<td>7 Gbps</td>
<td>5 Gbps</td>
<td>Multiple GE RJ45, GE SFP and 10 GE SFP+ / GE SFP slots</td>
</tr>
</tbody>
</table>
Deployment

Next Generation Firewall (NGFW)
- Reduce complexity by combining threat protection security capabilities into single high-performance network security appliance
- Identify and stop threats with powerful intrusion prevention beyond port and protocol that examines the actual applications in your network traffic
- Delivers industry’s highest SSL inspection performance using industry-mandated ciphers while maximizing ROI
- Proactively blocks newly discovered sophisticated attacks in real-time with advanced threat protection

Segmentation
- Intent-based Segmentation builds robust security framework while proactively reducing risk, cost and complexity
- Integrates with Security Fabric seamlessly to allow third party solutions and continuous trust assessment and thereby prevent sophisticated attacks
- Protects critical business applications and helps implement any compliance without network redesigns

IPS
- Highly cost-effective mitigation of unpatched vulnerability for hard-to-patch systems such as IOT, ICS, and Scada
- Protect sensitive data to achieve various regulatory compliance such as PCI, HIPPA, PII, GDPR
- Multiple inspection engines, threat intelligence feeds and advanced threat protection options to defend against unknown threats in real-time
- Best of breed intrusion prevention with high-performance SSL inspection

Mobile Security for 4G, 5G and IOT
- SGi LAN security powered by multiple SPUs to provide high performance CGNAT and accelerate IPv4 and IPv6 traffic
- RAN Access Security with highly scalable and best performing IPsec aggregation and control security gateway (SecGW)
- Various high-speed interfaces to enable deployment flexibility
Hardware

FortiGate 1500D and 1500D-DC

- Custom SPU 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
- SPU 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

FortiGate 1500DT

1. USB Management Port
2. Console Port
3. USB Port
4. 2x GE RJ45 Management Ports
5. 16x GE SFP Slots
6. 16x GE RJ45 Ports
7. 8x 10 GE SFP+ / GE SFP (1500D, 1500D-DC)
8. 4x 10 GE RJ45 Ports (1500DT)

Network Processor

Fortinet’s new, breakthrough SPU 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 SPU 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
Fortinet Security Fabric

Security Fabric
The Security Fabric delivers broad visibility, integrated AI-driven breach prevention, and automated operations, orchestration, and response across all Fortinet and its ecosystem deployments. It allows security to dynamically expand and adapt as more and more workloads and data are added. Security seamlessly follows and protects data, users, and applications as they move between IoT, devices, and cloud environments throughout the network. All this is tied together under a single pane of glass management for significantly thereby delivering leading security capabilities across your entire environment while also significantly reducing complexity.

FortiGates are the foundation of Security Fabric, expanding security via visibility and control by tightly integrating with other Fortinet security products and Fabric-Ready Partner solutions.

FortiOS
Control all security and networking capabilities across the entire FortiGate platform with one intuitive operating system. Reduce complexity, costs, and response time with a truly consolidated next-generation security platform.

- A truly consolidated platform with a single OS and pane-of-glass for all security and networking services across all FortiGate platforms.
- Industry-leading protection: NSS Labs Recommended, VB100, AV Comparatives, and ICSA validated security and performance. Ability to leverage latest technologies such as deception-based security.
- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings in addition to true TLS 1.3 support.
- Prevent, detect, and mitigate advanced attacks automatically in minutes with integrated AI-driven breach prevention and advanced threat protection.
- Improved user experience with innovative SD-WAN capabilities and ability to detect, contain and isolate threats with Intent-based Segmentation.
- Utilize SPU hardware acceleration to boost security capability performance.

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 and other network and security vendors, as well as law enforcement agencies.

FortiCare™ 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.

For more information, please refer to forti.net/fortiguard and forti.net/forticare
### Specifications

<table>
<thead>
<tr>
<th><strong>Hardware Specifications</strong></th>
<th>FG-1500D / 1500D-DC</th>
<th>FG-1500DT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Accelerated 10 GE SFP+/GE RJ45 Ports</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Hardware Accelerated GE SFP Ports</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Hardware Accelerated GE RJ45 Ports</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Console Port</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Onboard Storage</td>
<td>2x 240 GB SSD</td>
<td></td>
</tr>
<tr>
<td>Included Transceivers</td>
<td>2x SFP+ (SR 10GE)</td>
<td></td>
</tr>
</tbody>
</table>

#### System Performance — Enterprise Traffic Mix

- **IPS Throughput**
  - 13 Gbps
- **NF Lawn Throughput**
  - 7 Gbps
- **Threat Protection Throughput**
  - 5 Gbps

#### System Performance and Capacity

- **IPv4 Firewall Throughput**
  - (1518 / 512 / 84 byte, UDP)
  - 80 / 80 / 55 Gbps
- **IPv6 Firewall Throughput**
  - (1518 / 512 / 86 byte, UDP)
  - 80 / 80 / 55 Gbps
- **Firewall Latency**
  - (64 byte, UDP)
  - 3 μs
- **Firewall Throughput (Packet per Second)**
  - 82.5 Mpps
- **Concurrent Sessions (TCP)**
  - 12 Million
- **New Sessions/Second (TCP)**
  - 300,000
- **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**
  - 100,000
- **SSL-VPN Throughput**
  - 4 Gbps
- **Concurrent SSL-VPN Users**
  - (Recommended Maximum, Tunnel Mode)
  - 10,000

| **SSL Inspection Throughput** | 5.7 Gbps |
| **SSL Inspection CPS (IPS, avg. HTTPS)** | 3,100 |
| **SSL Inspection Concurrent Session (IPS, avg. HTTPS)** | 800,000 |
| **Application Control Throughput** | 16 Gbps |
| **CAPNMAP Throughput** | 20.8 Gbps |
| **Virtual Domains (Default / Maximum)** | 10 / 250 |
| **Maximum Number of FortiSwitches Supported** | 128 |
| **Maximum Number of FortiAPs (Total / Tunnel)** | 4,096 / 2,048 |
| **Maximum Number of FortiTokens** | 20,000 |
| **Maximum Number of Registered Endpoints** | 20,000 |
| **Available Global/Service Cluster Configurations** | |

### Dimensions and Power

<table>
<thead>
<tr>
<th><strong>Dimensions</strong></th>
<th>FG-1500D / 1500D-DC</th>
<th>FG-1500DT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height x Width x Length (inches)</td>
<td>3.5 x 17.24 x 21.81</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>89 / 43.6 / 35.4</td>
<td></td>
</tr>
<tr>
<td><strong>AC Power Supply</strong></td>
<td>100–240V AC, 50–60 Hz</td>
<td></td>
</tr>
<tr>
<td><strong>DC Power Supply</strong></td>
<td>40.5–57V DC</td>
<td></td>
</tr>
<tr>
<td><strong>Power Consumption (Average / Maximum)</strong></td>
<td>336 / 403.2 W / 230 / 350 W</td>
<td></td>
</tr>
<tr>
<td><strong>Heat Dissipation</strong></td>
<td>1,375 BTU/h / 1,193 BTU/h</td>
<td></td>
</tr>
</tbody>
</table>

#### 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
- **Noise Level**
  - 59 dBA
- **Operating Altitude**
  - Up to 7,400 ft (2,250 m)

### Compliance

- **FCC Part 15 Class A, C-Tick, VCCI, CE, UL/cUL, CB**
- **ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN**
- **USGv6/IPv6**

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**Note:** All performance values are “up to” and vary depending on system configuration.

1. IPsec VPN performance test uses AES256-SHA256.
2. IPS, Enterprise Mix, Application Control, NGFW and Threat Protection are measured with Logging enabled.
3. SSL Inspection performance uses an average of HTTPS sessions of different cipher suites.
4. NGFW performance is measured with Firewall, IPS and Application Control enabled.
5. Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.
## Order Information

<table>
<thead>
<tr>
<th>Product</th>
<th>SKU</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FortiGate 1500D</td>
<td>FG-1500D</td>
<td>8x 10 GE SFP+ slots, 16x GE SFP slots, 18x GE RJ45 ports (including 16x ports, 2x management/HA ports), SPU NP6 and CP8 hardware accelerated, 480 GB SSD onboard storage, dual AC power supplies.</td>
</tr>
<tr>
<td>FortiGate 1500D-DC</td>
<td>FG-1500D-DC</td>
<td>8x 10 GE SFP+ slots, 16x GE SFP slots, 18x GE RJ45 ports (including 16x ports, 2x management/HA ports), SPU NP6 and CP8 hardware accelerated, 480 GB SSD onboard storage, dual DC power supplies.</td>
</tr>
<tr>
<td>FortiGate 1500DT</td>
<td>FG-1500DT</td>
<td>4x 10 GE SFP+ slots, 4x 10 GE RJ45 ports, 16x GE SFP ports, 18x GE RJ45 ports (including 16x ports, 2x management/HA ports), SPU NP6 and CP8 hardware accelerated, 480 GB SSD onboard storage, dual AC power supplies.</td>
</tr>
</tbody>
</table>

## Optional Accessories

<table>
<thead>
<tr>
<th>Accessory Description</th>
<th>SKU</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 GE SFP LX transceiver module</td>
<td>FG-TRAN-LX</td>
<td>1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.</td>
</tr>
<tr>
<td>1 GE SFP RJ45 transceiver module</td>
<td>FG-TRAN-GC</td>
<td>1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+ slots.</td>
</tr>
<tr>
<td>1 GE SFP SX transceiver module</td>
<td>FG-TRAN-SX</td>
<td>1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.</td>
</tr>
<tr>
<td>10 GE SFP+ transceiver module, short range</td>
<td>FG-TRAN-SFP+SR</td>
<td>10 GE SFP+ transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots.</td>
</tr>
<tr>
<td>10 GE SFP+ transceiver module, long range</td>
<td>FG-TRAN-SFP+LR</td>
<td>10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.</td>
</tr>
<tr>
<td>Rack mount sliding rails</td>
<td>SP-FG3040B-RAIL</td>
<td>Rack mount sliding rails for FG-1000C/-DC, FG-1500D, FG-3040C/-DC, FG-3140B/-DC, FG-3240C/-DC, 3700D and 3950B/-DC.</td>
</tr>
<tr>
<td>AC power supply</td>
<td>SP-FG1200D-PS</td>
<td>AC power supply for FG-1200D.</td>
</tr>
<tr>
<td>DC power supply</td>
<td>SP-FG1500D-DC-PS</td>
<td>DC power supply for FG-1500D-DC.</td>
</tr>
</tbody>
</table>

## Bundles

FortiGuard Labs delivers a number of security intelligence services to augment the FortiGate firewall platform. You can easily optimize the protection capabilities of your FortiGate with one of these FortiGuard Bundles.

<table>
<thead>
<tr>
<th>Bundles</th>
<th>360 Protection</th>
<th>Enterprise Protection</th>
<th>UTM Protection</th>
<th>Threat Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>FortiCare</td>
<td></td>
<td>24x7</td>
<td>24x7</td>
<td>24x7</td>
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<tr>
<td>FortiGuard App Control Service</td>
<td></td>
<td>24x7</td>
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<td>24x7</td>
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<tr>
<td>FortiGuard IPS Service</td>
<td></td>
<td>24x7</td>
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<td>24x7</td>
</tr>
<tr>
<td>FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service</td>
<td></td>
<td>24x7</td>
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<td>24x7</td>
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<tr>
<td>FortiGuard Web Filtering Service</td>
<td></td>
<td>24x7</td>
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<td>24x7</td>
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<tr>
<td>FortiGuard Antivirus Service</td>
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<td>24x7</td>
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<td>24x7</td>
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<tr>
<td>FortiGuard Security Rating Service</td>
<td></td>
<td>24x7</td>
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<td>24x7</td>
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<tr>
<td>FortiGuard Industrial Service</td>
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<td>24x7</td>
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<td>24x7</td>
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<tr>
<td>FortiCASB Saas-only Service</td>
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<td>24x7</td>
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<tr>
<td>FortiConverter Service</td>
<td></td>
<td>24x7</td>
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<td>24x7</td>
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<tr>
<td>SD-WAN Cloud Assisted Monitoring</td>
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<td>24x7</td>
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<td>24x7</td>
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<tr>
<td>SD-WAN Overlay Controller VPN Service</td>
<td></td>
<td>24x7</td>
<td></td>
<td>24x7</td>
</tr>
<tr>
<td>FortiAnalyzer Cloud</td>
<td></td>
<td>24x7</td>
<td></td>
<td>24x7</td>
</tr>
</tbody>
</table>

1. 24x7 plus Advanced Services Ticket Handling  
2. Available when running FortiOS 6.2