

# FortiGate FortiWiFi 50G Series

FG-50G-DSL, FG-50G-SFP, FG-50G-SFP-PoE, FG-51G-SFP-POE, FWF-50G-DSL, FWF-50G-SFP



#### **Highlights**

#### **Gartner Magic Quadrant**

**Leader** for both Network Firewalls and SD-WAN.

#### Security-Driven

**Networking** with FortiOS delivers converged networking and security.

#### **Unparalleled Performance**

with Fortinet's patented SoC processors.

#### **Enterprise Security**

with consolidated AI / ML-powered FortiGuard Services.

#### **Simplified Operations**

with centralized management for networking and security, automation, deep analytics, and self-healing.

### **Converged Next-Generation Firewall (NGFW) and SD-WAN**

The FortiGate Next-Generation Firewall 50G series is ideal for building security-driven networks at distributed enterprise sites and transforming WAN architecture at any scale.

With a rich set of Al/ML-based FortiGuard security services and our integrated Security Fabric platform, the FortiGate FortiWiFi 50G series delivers coordinated, automated, end-to-end threat protection across all use cases.

FortiGate has the industry's first integrated SD-WAN and zero-trust network access (ZTNA) enforcement within an NGFW solution and is powered by one OS. FortiGate FortiWiFi 50G automatically controls, verifies, and facilitates user access to applications, delivering consistency with a seamless and optimized user experience.

| IPS       | NGFW      | Threat Protection | Interfaces   |
|-----------|-----------|-------------------|--|
| 2.25 Gbps | 1.25 Gbps | 1.1 Gbps          | Multiple GE RJ45   Variants with 5G, PoE, DSL, SFP, WiFi, and/or storage |

FortiOS Everywhere



Available in



**Appliance** 



Virtual





Cloud



### FortiOS, Fortinet's Advanced Operating System

FortiOS enables the convergence of high performing networking and security across the Fortinet Security Fabric. Because it can be deployed anywhere, it delivers consistent and context-aware security posture across network, endpoint, and multi-cloud environments.

FortiOS powers all FortiGate deployments whether a physical or virtual device, as a container, or as a cloud service. This universal deployment model enables the consolidation of many technologies and use cases into organically built best-of-breed capabilities, unified operating system, and ultra-scalability. The solution allows organizations to protect all edges, simplify operations, and run their business without compromising performance or protection.

FortiOS dramatically expands the Fortinet Security Fabric's ability to deliver advanced AI/ML-powered services, inline advanced sandbox detection, integrated ZTNA enforcement, and more. It provides protection across hybrid deployment models for hardware, software, and Software-as-a-Service with SASE.

FortiOS expands visibility and control, ensures the consistent deployment and enforcement of a simplified, single policy and management framework. Its security policies enable centralized management across large-scale networks with the following key attributes:

- Interactive drill-down and topology viewers that display real-time status
- On-click remediation that provides accurate and quick protection against threats and abuses
- Unique threat score system correlates weighted threats with users to prioritize investigations



Intuitive easy to use view into the network and endpoint vulnerabilities



Visibility with FOS Application Signatures

#### **FortiConverter Service**

FortiConverter Service provides hassle-free migration to help organizations transition from a wide range of legacy firewalls to FortiGate Next-Generation Firewalls quickly and easily. The service eliminates errors and redundancy by employing best practices with advanced methodologies and automated processes. Organizations can accelerate their network protection with the latest FortiOS technology.





#### **FortiGuard Services**

#### **Network and File Security**

Services provide protection against network-based and file-based threats. This consists of Intrusion Prevention (IPS) which uses AI/M models to perform deep packet/SSL inspection to detect and stop malicious content, and apply virtual patching when a new vulnerability is discovered. It also includes Anti-Malware for defense against known and unknown file-based threats. Anti-malware services span both antivirus and file sandboxing to provide multi-layered protection and are enhanced in real-time with threat intelligence from FortiGuard Labs. Application Control enhances security compliance and offers real-time application visibility.

#### Web / DNS Security

Services provide protection against web-based threats including DNS-based threats, malicious URLs (including even in emails), and botnet/command and control communications. DNS filtering provides full visibility into DNS traffic while blocking high-risk domains, and protects against DNS tunneling, DNS infiltration, C2 server ID and Domain Generation Algorithms (DGA). URL filtering leverages a database of 300M+ URLs to identify and block links to malicious sites and payloads. IP Reputation and anti-botnet services prevent botnet communications, and block DDoS attacks from known sources.

#### SaaS and Data Security

SaaS and Data Security Services address numerous security use cases across application usage as well as overall data security. This service consists of Data Leak Prevention (DLP) which ensures data visibility, management, and protection (including blocking exfiltration) across networks, clouds, and users, while simplifying compliance and privacy implementations. The FortiGuard Data Loss Prevention Service provides advanced data protection by using real-time data classification and pattern matching to identify sensitive information. It offers comprehensive monitoring and control over data movement, ensuring that sensitive data is not inadvertently or maliciously transmitted outside the organization. Additionally, The FortiGuard Data Loss Prevention Service facilitates compliance with various regulatory requirements by automating the enforcement of data security policies and providing detailed reporting and audit trails.

#### **Zero-Day Threat Prevention**

Zero-day threat prevention entails Fortinet's Al-based inline malware prevention, our most advanced sandbox service, to analyze and block unknown files in real-time, offering subsecond protection against zero-day and sophisticated threats across all NGFWs. The service also has a built-in MITRE ATT&CK® matrix to accelerate investigations. The service focuses on comprehensive defense by blocking unknown threats while streamlining incident response efforts and reducing security overhead.

#### **OT Security**

The service provides OT detection, OT vulnerability correlation, virtual patching, OT signatures, and industry-specific protocol decoders for overall robust defense of OT environments and devices.





### **Secure Any Edge at Any Scale**

#### Powered by Security Processing Unit (SPU)

Traditional firewalls cannot protect against today's content- and connection-based threats because they rely on off-the-shelf hardware and general-purpose CPUs, causing a dangerous performance gap. Fortinet's custom SPU processors deliver the power you need—up to 520Gbps—to detect emerging threats and block malicious content while ensuring your network security solution does not become a performance bottleneck.

#### **ASIC Advantage**



#### Secure SD-WAN ASIC SP5

- Combines a RISC-based CPU with Fortinet's proprietary Security Processing Unit (SPU) content and network processors for unmatched performance
- Delivers industry's fastest application identification and steering for efficient business operations
- Accelerates IPsec VPN performance for best user experience on direct internet access
- Enables best of breed NGFW Security and Deep SSL Inspection with high performance
- Extends security to access layer to enable SD-Branch transformation with accelerated and integrated switch and access point connectivity





Intuitive view and clear insights into network security posture with FortiManager

## **Centralized Network and Security Management at Scale**

FortiManager, the centralized management solution from Fortinet, enables integrated management of the Fortinet security fabric, including devices like FortiGate, FortiSwitch, and FortiAP. It simplifies and automates the oversight of network and security functions across diverse environments, serving as the fundamental component for deploying Hybrid Mesh Firewalls.



### **Use Cases**



#### **Next Generation Firewall (NGFW)**

- FortiGuard Labs' suite of Al-powered Security Services—natively integrated with your NGFW—secures web, content, and devices and protects networks from ransomware and sophisticated cyberattacks
- Real-time SSL inspection (including TLS 1.3) provides full visibility into users, devices, and applications across the attack surface
- Fortinet's patented SPU (Security Processing Unit) technology provides industry-leading high-performance protection



#### **Secure SD-WAN**

- FortiGate enables best-of-breed WAN Edge with integrated SD-WAN, WAN optimization, security, and unified management from a single FortiOS operating system
- FortiGate, built on a patented SD-WAN based ASIC, delivers faster applications identification which avoids delay in accessing applications and accelerates overlay performance regardless locations
- Enhances work-from-anywhere with a comprehensive SASE solution by integrating clouddelivered SD-WAN with Security Service Edge (SSE)
- Achieves operational efficiencies at any scale through automation, deep analytics, and selfhealing



#### **Universal ZTNA**

- Control access to applications no matter where the user is and no matter where the application is hosted for universal application of access policies
- Provide extensive authentications, checks, and enforce policy prior to granting application access every time
- Agent-based access with FortiClient or agentless access via proxy portal for guest or BYOD

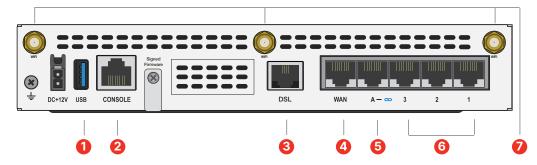


#### **Hardware**

#### FortiGate/FortiWiFi 50G-DSL







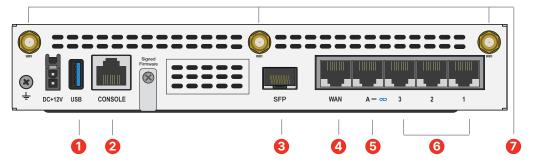
#### **Interfaces**

- 1. 1 x USB Port
- 2. 1 x Console Port
- 3. 1 x DSL RJ11 Port
- 4. 1 x GE RJ45 WAN Port
- 5. 1 x GE RJ45 FortiLink Port
- 6. 3 x GE RJ45 Ethernet Ports
- 7. 3 x WiFi Antenna Ports (FWF models only)

#### FortiGate/FortiWiFi 50G-SFP







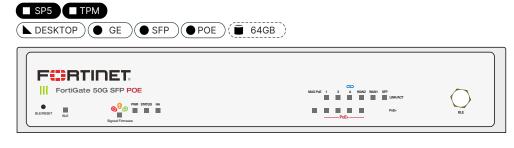
#### Interfaces

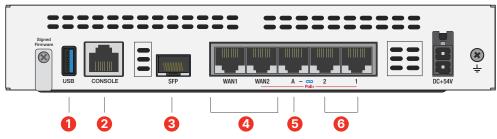
- 1. 1 x USB Port
- 2. 1 x Console Port
- 3. 1 x GE SFP Port
- 4. 1 x GE RJ45 WAN Port
- 5. 1 x GE RJ45 FortiLink Port
- 6. 3 x GE RJ45 Ethernet Ports
- 7. 3 x WiFi Antenna Ports (FWF models only)



### Hardware

#### FortiGate 50/51G-SFP-POE





#### Interfaces

- 1. 1 x USB Port
- 2. 1 x Console Port
- 3. 1 x GE SFP Port
- 4. 2 x GE RJ45 WAN Ports (WAN2 PoE+)
- 5. 1 x GE RJ45 FortiLink Port (PoE+)
- 6. 2 x GE RJ45 Ethernet Ports (PoE+)



#### **Hardware Features**



#### **Superior Wireless Coverage**

A built-in dual-band, dual-stream access point is integrated on the FortiWiFi 50G series which provides the industry's latest high-speed WiFi-6 (802.11ax) wireless access.



#### **Trusted Platform Module (TPM)**

The FortiGate FortiWiFi 50G series features a dedicated module that hardens physical networking appliances by generating, storing, and authenticating cryptographic keys. Hardware-based security mechanisms protect against malicious software and phishing attacks.



#### **Access Layer Security**

FortiLink protocol enables you to converge security and the network access by integrating the FortiSwitch into the FortiGate as a logical extension of the NGFW. These FortiLink enabled ports can be reconfigured as regular ports as needed.



#### **Compact and Reliable Form Factor**

Designed for small environments, you can place it on a desktop or wall-mount it. It is small, lightweight, yet highly reliable with a superior MTBF (Mean Time Between Failure), minimizing the chance of a network disruption.



| Service Accessimant of E MAN Pers   1   2   2   2   2   2   2   2   2   2  |   | FORTIGATE 50G-SFP | FORTIWIFI 50G-SFP | FORTIGATE 50G-SFP-POE | FORTIGATE 51G-SFP-POE                        |
|--|---|-------------------|-------------------|-----------------------|--|
| Sertiment Accelerated GE RIA45   | Hardware Specifications   |                   |                   |                       |  |
| Park   | Hardware Accelerated GE WAN Ports                                   | 1                 | 1                 | 2                     | 2  |
| POE   Porter Notes   | Hardware Accelerated GE RJ45<br>Ports                               | 3                 | 3                 | _                     | _  |
| Section  | Hardware Accelerated GE RJ45<br>POE/+ Ports                         | _                 | _                 |                       | 4<br>PoE power budget 30W (802.3at)          |
| Set  | Hardware Accelerated GE SFP<br>Slots                                | 1                 | 1                 | 1                     | 1  |
| Description   Port (RJ455)   | Hardware Accelerated GE RJ45<br>FortiLink Port (Default)            | 1                 | 1                 | _                     | _  |
| Function    | USB Port  | 1                 | 1                 | 1                     | 1  |
|  | Console Port (RJ45)   | 1                 | 1                 | 1                     | 1  |
| Microsia Portis (SMA)  | nternal Storage   | _                 | _                 | _                     | 64 GB SSD                                    |
| Note   | Trusted Platform Module (TPM)                                       | $\odot$           | $\odot$           | $\bigcirc$            | $\bigcirc$                                   |
|  | Bluetooth Low Energy (BLE)  | $\bigcirc$        | $\bigcirc$        | $\odot$               | $\bigcirc$                                   |
| Septem   Performance   | Antenna Ports (SMA)   | _                 | 3                 | _                     | _  |
| Part Throughput  | Wireless Interface  | _                 |                   | _                     | _  |
|  | System Performance — Enterprise Ti                                  | raffic Mix        |                   |                       |  |
| Treat Protection Throughput   2  | PS Throughput <sup>2</sup>  | 2.25 Gbps         | 2.25 Gbps         | 2.25 Gbps             | 2.25 Gbps                                    |
|  | NGFW Throughput 2, 4  | 1.25 Gbps         | 1.25 Gbps         | 1.25 Gbps             | 1.25 Gbps                                    |
| Firewall Throughput   5 / 5 / 4 Gbps   | Threat Protection Throughput 2,5                                    | 1.1 Gbps          | 1.1 Gbps          | 1.1 Gbps              | 1.1 Gbps                                     |
| 1518/1512/64 byte UDP packets)   | System Performance  |                   |                   |                       |  |
| A byte   IDP packets   |   | 5 / 5 / 4 Gbps    | 5 / 5 / 4 Gbps    | 5 / 5 / 4 Gbps        | 5 / 5 / 4 Gbps                               |
| Packet Per Second   Pack   | Firewall Latency<br>64 byte UDP packets)                            | 2.42 µs           | 2.42 µs           | 2.42 µs               | 2.42 µs                                      |
| Second   S   | Firewall Throughput<br>(Packets Per Second)                         | 6 Mpps            | 6 Mpps            | 6 Mpps                | 6 Mpps                                       |
| Peec VPN Throughput (512 byte)   | Concurrent Sessions (TCP)   | 720 000           | 720 000           | 720 000               | 720 000                                      |
| Pasec VPN Throughput (512 byte)  | New Sessions/Second (TCP)   | 85 000            | 85 000            | 85 000                | 85 000                                       |
| Seleteway   Psec VPN   200     | Firewall Policies   | 2000              | 2000              | 2000 2000             |  |
|  | Psec VPN Throughput (512 byte) 1                                    | 4.5 Gbps          | 4.5 Gbps          | 4.5 Gbps 4.5 Gh       |  |
| Part      | Gateway-to-Gateway IPsec VPN<br>Funnels                             | 200               | 200               | 200 200               |  |
| Concurrent SSL-VPN Users   Recommended Maximum, Tunnel   Concurrent SSL-VPN Users   Concurrent SSL-Inspection Throughput   I.3 Gbps   I.3 Gbp   | Client-to-Gateway IPsec VPN<br>Funnels                              | 250               | 250               | 250 250               |  |
| Recommended Maximum, Tunnel Mode   | SSL-VPN Throughput  |                   |                   |                       |  |
| SSL Inspection CPS IPS, avg. HTTPS) 3 699 699 699 699 699 699 699 699 699 6  | Concurrent SSL-VPN Users<br>(Recommended Maximum, Tunnel<br>Mode)   | _                 | _                 | _                     | _  |
| IPS, avg. HTTPS)   | SSL Inspection Throughput<br>(IPS, avg. HTTPS) <sup>3</sup>         | 1.3 Gbps          | 1.3 Gbps          | 1.3 Gbps              | 1.3 Gbps                                     |
| Application Control Throughput   2.8 Gbps   3.8 Gbps    | SSL Inspection CPS<br>(IPS, avg. HTTPS) <sup>3</sup>                | 699               | 699               | 699                   | 699  |
| ### HTTP 64K) 2  CAPWAP Throughput (HTTP 64K) 3.8 Gbps 3.8 Gbps 3.8 Gbps 3.8 Gbps  /irtual Domains (Default/ 5/5 5/5 5/5 5/5 5/5  //aximum Number of FortiSwitches Supported  //aximum Number of FortiAPs 16 / 8 16 / 8 16 / 8 16 / 8 16 / 8  //aximum Number of FortiTokens 500 500 500 500  //aximum Number of FortiTokens Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Passive, Active-Active, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Active, Active-Passive, Active-Active, Active-Active, Active-Active, Active-Passive, Active-Active, Active-Active, Active-Passive, Active-Active, Active- | SSL Inspection Concurrent<br>Session (IPS, avg. HTTPS) <sup>3</sup> | 74 000            | 74 000            | 74 000                | 74 000                                       |
| Askinum Number of FortiSwitches Supported  Askinum Number of FortiSwitches Supported  Askinum Number of FortiAPs 16 / 8 16 / 8 16 / 8 16 / 8 16 / 8  Total/Tunnel Mode)  Askinum Number of FortiTokens 500 500 500 500  Askinum Number of FortiTokens Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Passi | Application Control Throughput<br>HTTP 64K) <sup>2</sup>            | 2.8 Gbps          | 2.8 Gbps          | 2.8 Gbps              | 2.8 Gbps                                     |
| Maximum Number of FortiSwitches Supported  8 8 8 8 8 8 8  Maximum Number of FortiAPs 16 / 8 16 / 8 16 / 8  Total/Tunnel Mode)  Maximum Number of FortiTokens 500 500 500 500  Idigh Availability Configurations Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Passive, Active-Active, Active-Active, Active-Passive, Active-Active, Active-Active, Active-Passive, Active-Active, Acti | CAPWAP Throughput (HTTP 64K)  | 3.8 Gbps          | 3.8 Gbps          | 3.8 Gbps              | 3.8 Gbps                                     |
| Azimum Number of FortiAPs 16 / 8 16 / 8 16 / 8 16 / 8  Maximum Number of FortiTokens 500 500 500 500  High Availability Configurations Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Passive, Active-Active, Active-Passive, Active-Active, Active-Passive, Active-Active, Act | /irtual Domains (Default/<br>Maximum)                               | 5/5               | 5/5               |                       | 5/5  |
| Total/Tunnel Mode)  Maximum Number of FortiTokens 500 500 500 500 500  High Availability Configurations Active-Active, Active-Passive, Active-Active, Active-Passive, Active-P | Maximum Number of<br>FortiSwitches Supported                        |                   |                   |                       |  |
| digh Availability Configurations  Active-Active, Active-Passive,  Active-Active, Active-Passive,  Active-Active, Active-Passive,  Active-Active, Active-Passive,   | Maximum Number of FortiAPs<br>(Total/Tunnel Mode)                   | 16 / 8            | 16 / 8            | 16 / 8                | 16 / 8                                       |
|  | Maximum Number of FortiTokens                                       | 500               |                   | 500                   | 500  |
|  | High Availability Configurations                                    |                   |                   |                       | Active-Active, Active-Passive,<br>Clustering |

Note: All performance values are "up to" and vary depending on system configuration.



<sup>&</sup>lt;sup>1</sup> IPsec VPN performance test uses AES256-SHA256.

 $<sup>^{\</sup>rm 2}$  IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.

 $<sup>^{\</sup>rm 3}$  SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

<sup>&</sup>lt;sup>4</sup> NGFW performance is measured with Firewall, IPS and Application Control enabled.

<sup>5</sup> Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

|   | FORTIGATE 50G-SFP  | FORTIWIFI 50G-SFP  | FORTIGATE 50G-SFP-POE  | FORTIGATE 51G-SFP-POE  |  |
|---|--|--|--|--|--|
| Dimensions                                      |  |  |  |  |  |
| Height x Width x Length (inches)                | 1.6 × 8.5 × 6.3  | 1.6 × 8.5 × 6.3  | 1.6 × 8.5 × 6.3  | 1.6 × 8.5 × 6.3  |  |
| Height x Width x Length (mm)                    | 40.5 × 216 × 160   | 40.5 × 216 × 160   | 40.5 × 216 × 160   | 40.5 × 216 × 160   |  |
| Weight  | 2.2 lbs (1.0 kg)   |  |
| Form Factor<br>(supports EIA/non-EIA standards) | Desktop  | Desktop Desktop  |  | Desktop  |  |
| Operating Environment and Certific              | ations   |  |  |  |  |
| Power Rating                                    | 12VDC, 3A  | 12VDC, 3A  | 54VDC, TBD current   | 54VDC, TBD current   |  |
| Power Required                                  | Powered by External DC Power<br>Adapter, 100–240V AC, 50/60 Hz | Powered by External DC Power<br>Adapter, 100–240V AC, 50/60 Hz | Powered by External DC Power<br>Adapter, 100–240V AC, 50/60 Hz | Powered by External DC Power<br>Adapter, 100–240V AC, 50/60 Hz |  |
| Maximum Current                                 | 100V/0.4A, 240V/0.2A   | 100V/0.4A, 240V/0.2A   | 100V/0.4A, 240V/0.2A   | 100V/0.4A, 240V/0.2A   |  |
| Power Consumption<br>(Average/Maximum)          | 8.3 W / 8.9 W  | 12.5 W / 13.9 W  | 75.4 W / 76.3 W  | 78.7 W / 78.1 W  |  |
| Heat Dissipation                                | 30.35 BTU/h  | 47.4 BTU/h   | 260.48 BTU/h   | 268.54 BTU/  |  |
| Operating Temperature                           | 32°F to 104°F (0°C to 40°C)                                    |  |
| Storage Temperature                             | -31°F to 158°F (-35°C to 70°C)                                 |  |
| Humidity  | 10% to 90% non-condensing                                      |  |
| Noise Level                                     | Fanless 0 dBA  | Fanless 0 dBA  | Fanless 0 dBA  | Fanless 0 dBA  |  |
| Operating Altitude                              | Up to 10 000 ft (3048 m)                                       | Up to 10 000 ft (3048 m)                                       | Up to 10 000 ft (3048 m) Up to 10 000 ft (3048 m)              |  |  |
| Compliance                                      | FCC, ISED, CE, UL/cUL, CB                                      | FCC, ISED, CE, UL/cUL, CB                                      | FCC, IC, CE, UL/cUL, CB  | FCC, IC, CE, UL/cUL, CB  |  |
| Certifications                                  | USGv6/IPv6   | USGv6/IPv6   | USGv6/IPv6   | USGv6/IPv6   |  |
| Radio Specifications                            |  |  |  |  |  |
| Multiple User (MU) MIMO                         | _  | 2 × 2  | _  | _  |  |
| Maximum Wi-Fi Speeds                            | _  | 1201 Mbps @ 5 GHz,<br>574 Mbps @ 2.4 GHz                       | _  | _  |  |
| Maximum Tx Power                                | _  | 21.0 dBm per chain @ 2.4GHz,<br>19.5 dBm per chain @ 5GHz      | _  | _  |  |



|  | FORTIGATE 50G-DSL                         | FORTIWIFI 50G-DSL                                    |
|--|---|--|
| Hardware Specifications  |   |  |
| Hardware Accelerated GE WAN Ports                              | 1   | 1  |
| Hardware Accelerated GE RJ45 Ports                             | 3   | 3  |
| lardware Accelerated GE RJ45 FortiLink Ports (Default)         | 1   | 1  |
| OSL RJ11 Port  | 1   | 1  |
| JSB Port   | 1   | 1  |
| Console Port (RJ45)  | 1   | 1  |
| Trusted Platform Module (TPM)                                  | $\odot$                                   | $\odot$  |
| Bluetooth Low Energy (BLE)                                     | $\odot$                                   | $\odot$  |
| Antenna Ports (SMA)  | _   | 3  |
| Wireless Interface   | -   | Dual Radio (2.4 GHz/ 5 GHz),<br>802.11 a/b/g/n/ac/ax |
| System Performance — Enterprise Traffic Mix                    |   |  |
| PS Throughput <sup>2</sup>                                     | 2.25 Gbps                                 | 2.25 Gbps  |
| NGFW Throughput 2,4  | 1.25 Gbps                                 | 1.25 Gbps  |
| Threat Protection Throughput 2,5                               | 1.1 Gbps                                  | 1.1 Gbps   |
| System Performance   |   |  |
| Firewall Throughput (1518/512/64 byte UDP packets)             | 5 / 5 / 4 Gbps                            | 5 / 5 / 4 Gbps                                       |
| Firewall Latency (64 byte UDP packets)                         | 2.42 μs                                   | 2.42 µs  |
| Firewall Throughput (Packets Per Second)                       | 6 Mpps                                    | 6 Mpps   |
| Concurrent Sessions (TCP)                                      | 720 000                                   | 720 000  |
| New Sessions/Second (TCP)                                      | 85 000                                    | 85 000   |
| rirewall Policies  | 2000                                      | 2000   |
| Psec VPN Throughput (512 byte) 1                               | 4.5 Gbps                                  | 4.5 Gbps   |
| Gateway-to-Gateway IPsec VPN Tunnels                           | 200                                       | 200  |
| Client-to-Gateway IPsec VPN Tunnels                            | 250                                       | 250  |
| SSL-VPN Throughput   | _   | _  |
| Concurrent SSL-VPN Users<br>(Recommended Maximum, Tunnel Mode) | _   | _  |
| SSL Inspection Throughput (IPS, avg. HTTPS) <sup>3</sup>       | 1.3 Gbps                                  | 1.3 Gbps   |
| SSL Inspection CPS (IPS, avg. HTTPS) <sup>3</sup>              | 699                                       | 699  |
| SSL Inspection Concurrent Session (IPS, avg. HTTPS) 3          | 74 000                                    | 74 000   |
| Application Control Throughput (HTTP 64K) <sup>2</sup>         | 2.8 Gbps                                  | 2.8 Gbps   |
| CAPWAP Throughput (HTTP 64K)                                   | 3.8 Gbps                                  | 3.8 Gbps   |
| /irtual Domains (Default/Maximum)                              | 5/5                                       | 5/5  |
| Maximum Number of FortiSwitches Supported                      | 8   | 8  |
| Maximum Number of FortiAPs<br>(Total/Tunnel Mode)              | 16 / 8                                    | 16 / 8   |
| Maximum Number of FortiTokens                                  | 500                                       | 500  |
| High Availability Configurations                               | Active-Active, Active-Passive, Clustering | Active-Active, Active-Passive, Clustering            |

Note: All performance values are "up to" and vary depending on system configuration.



<sup>&</sup>lt;sup>1</sup> IPsec VPN performance test uses AES256-SHA256.

 $<sup>^{\</sup>rm 2}$  IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.

 $<sup>^{\</sup>mbox{\tiny 3}}$  SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

 $<sup>^{\</sup>rm 4}$  NGFW performance is measured with Firewall, IPS and Application Control enabled.

<sup>5</sup> Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

|   | FORTIGATE 50G-DSL  | FORTIWIFI 50G-DSL  |
|---|--|--|
| Dimensions                                  |  |  |
| Height x Width x Length (inches)            | 1.7 × 8.5 × 7.0  | 1.7 × 8.5 × 7.0  |
| leight x Width x Length (mm)                | 42 × 216 × 178   | 42 × 216 × 178   |
| Veight                                      | 2.2 lbs (1.0 kg)   | 2.2 lbs (1.0 kg)   |
| orm Factor (supports EIA/non-EIA standards) | Desktop  | Desktop  |
| perating Environment and Certifications     |  |  |
| Power Rating                                | 12VDC, 3A  | 12VDC, 3A  |
| ower Required                               | Powered by External DC Power Adapter,<br>100-240V AC, 50/60 Hz | Powered by External DC Power Adapter,<br>100–240V AC, 50/60 Hz |
| Maximum Current                             | 100V/0.2A, 240V/0.1A   | 100V/0.3A, 240V/0.15A  |
| Power Consumption (Average/Maximum)         | 12.43 W / 13.01 W  | 17.74 W / 19.0 W   |
| leat Dissipation                            | 44.36 BTU/hr   | 64.79 BTU/h  |
| Operating Temperature                       | 32°F to 104°F (0°C to 40°C)                                    | 32°F to 104°F (0°C to 40°C)                                    |
| Storage Temperature                         | -31°F to 158°F (-35°C to 70°C)                                 | -31°F to 158°F (-35°C to 70°C)                                 |
| lumidity                                    | 10% to 90% non-condensing                                      | 10% to 90% non-condensing                                      |
| loise Level                                 | Fanless 0 dBA  | Fanless 0 dBA  |
| Operating Altitude                          | Up to 10 000 ft (3048 m)                                       | Up to 10 000 ft (3048 m)                                       |
| Compliance                                  | FCC, ISED, CE, UL/cUL, CB                                      | FCC, ISED, CE, UL/cUL, CB                                      |
| ertifications                               | USGv6/IPv6   | USGv6/IPv6   |
| DSL Modem Supported Mode                    |  |  |
| DSL2  | $\odot$  | $\odot$  |
| ADSL2                                       | $\odot$  | $\odot$  |
| ADSL2+                                      | $\bigcirc$   | $\odot$  |
| S.DMT                                       | $\odot$  | $\odot$  |
| 1.413                                       | $\bigcirc$   | $\odot$  |
| S.Lite                                      | $\odot$  | $\odot$  |
| DSL Modem Supported Type                    |  |  |
| nnex A, B, I, J, M, L                       | $\odot$  | $\odot$  |
| adio Specifications                         |  |  |
| Multiple User (MU) MIMO                     | _  | 2 × 2  |
| Maximum Wi-Fi Speeds                        | _  | 1201 Mbps @ 5 GHz, 574 Mbps @ 2.4 GHz                          |
| Maximum Tx Power                            | _  | 21.0 dBm per chain @ 2.4GHz, 19.5 dBm per chain @ 5G           |



### **Subscriptions**

|                             |   |            |                                      | Bundles                      |                               |  |
|-----------------------------|---|------------|--------------------------------------|------------------------------|-------------------------------|--|
| Service Category            | Service Offering  | A-la-carte | Enterprise<br>Protection             | Unified Threat<br>Protection | Advanced Threat<br>Protection |  |
| FortiGuard Security         | IPS — IPS, Malicious/Botnet URLs  | •          | •                                    | •                            | •                             |  |
| Services                    | Anti-Malware Protection (AMP)—AV, Botnet Domains, Mobile Malware, Virus Outbreak Protection, Content Disarm and Reconstruct <sup>3</sup> , Al-based Heurestic AV, FortiGate Cloud Sandbox | •          | •                                    | •                            | •                             |  |
|                             | URL, DNS and Video Filtering — URL, DNS and Video <sup>3</sup> Filtering, Malicious Certificate   | •          | •                                    | •                            |                               |  |
|                             | Anti-Spam   |            | •                                    | •                            |                               |  |
|                             | Al-based Inline Malware Prevention <sup>3</sup>   | •          | •                                    |                              |                               |  |
|                             | Data Loss Prevention (DLP) 1  | •          | •                                    |                              |                               |  |
|                             | Attack Surface Security — IoT Device Detection, IoT Vulnerability Correlation and Virtual Patching, Security Rating, Outbreak Check   | •          | •                                    |                              |                               |  |
|                             | OT Security—OT Device Detection, OT vulnerability correlation and Virtual Patching, OT Application Control and IPS <sup>1</sup>   | •          |                                      |                              |                               |  |
|                             | Application Control   |            | included with FortiCare Subscription |                              |                               |  |
|                             | Inline CASB <sup>3</sup>  |            | included with For                    | tiCare Subscription          |                               |  |
| SD-WAN and SASE<br>Services | SD-WAN Underlay Bandwidth and Quality Monitoring  | •          |                                      |                              |                               |  |
| Services                    | SD-WAN Overlay-as-a-Service   | •          |                                      |                              |                               |  |
|                             | SD-WAN Connector for FortiSASE Secure Private Access  | •          |                                      |                              |                               |  |
|                             | SASE connector for FortiSASE Secure Edge Management (with 10Mbps Bandwidth) <sup>2</sup>  | •          |                                      |                              |                               |  |
| NOC and SOC<br>Services     | FortiConverter Service for one time configuration conversion  | •          | •                                    |                              |                               |  |
|                             | Managed FortiGate Service—available 24×7, with Fortinet NOC experts performing device setup, network, and policy change management  | •          |                                      |                              |                               |  |
|                             | FortiGate Cloud—Management, Analysis, and One Year Log Retention  | •          |                                      |                              |                               |  |
|                             | FortiManager Cloud  | •          |                                      |                              |                               |  |
|                             | FortiAnalyzer Cloud   | •          |                                      |                              |                               |  |
|                             | FortiGuard SOCaaS—24×7 cloud-based managed log monitoring, incident triage, and SOC escalation service  | •          |                                      |                              |                               |  |
| Hardware and                | FortiCare Essentials <sup>2</sup>   | •          |                                      |                              |                               |  |
| Software Support            | FortiCare Premium   | •          | •                                    | •                            | •                             |  |
|                             | FortiCare Elite   | •          |                                      |                              |                               |  |
| Base Services               | Device/OS Detection, GeoIPs, Trusted CA Certificates, Internet Services and Botnet IPs, DDNS (v4/v6), Local Protection, PSIRT Check, Anti-Phishing  |            | included with For                    | tiCare Subscription          |                               |  |
|                             |   |            |                                      |                              |                               |  |

- 1. Full features available when running FortiOS 7.4.1.
- 2. Desktop Models only.
- 3. Not available for FortiGate/FortiWiFi 40F, 60E, 60F, 80E, and 90E series from 7.4.4 onwards. Not available for FortiGate/FortiWiFi 50G series in any OS build.



#### **FortiGuard 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.



#### **FortiCare Services**

Fortinet prioritizes customer success through FortiCare Services, optimizing the Fortinet Security Fabric solution. Our comprehensive lifecycle services include Design, Deploy, Operate, Optimize, and Evolve. The FortiCare Elite, one of the service variants, offers heightened SLAs and swift issue resolution with a dedicated support team. This advanced support option includes an Extended End-of-Engineering-Support of 18 months, providing flexibility. Access the intuitive FortiCare Elite Portal for a unified view of device and security health, streamlining operational efficiency and maximizing Fortinet deployment performance.



## **Ordering Information**

| Product               | SKU                  | Description   |
|-----------------------|----------------------|---|
| FortiGate 50G-DSL     | FG-50G-DSL           | 5x GE RJ45 ports (including 4x Internal Ports, 1x WAN Ports) with 1x embedded DSL module.   |
| FortiGate 50G-SFP     | FG-50G-SFP           | 5 x GE RJ45 ports (including 4 x Internal Ports, 1 x WAN Ports), 1x SFP port.   |
| FortiGate 50G-SFP-POE | FG-50G-SFP-PoE       | 3x RJ45 PoE+ ports, 1x RJ45 PoE+ WAN, 1 x RJ45 WAN port, 1x SFP port.   |
| FortiGate-51G-SFP-PoE | FG-51G-SFP-POE       | 3x RJ45 PoE+ ports, 1x RJ45 PoE+ WAN, 1x RJ45 WAN port, 1x SFP port, with 64GB SSD storage.   |
| FortiWiFi 50G-DSL     | FWF-50G-DSL-[RC]     | 5 x GE RJ45 ports (including 4 x Internal Ports, 1 x WAN Ports), 1x DSL port, Wireless (802.11a/b/g/n/ac/ax).                       |
| FortiWiFi 50G-SFP     | FWF-50G-SFP-[RC]     | 5 x GE RJ45 ports (including 4 x Internal Ports, 1 x WAN Ports), 1x SFP, Wireless (802.11a/b/g/n/ac/ax).                            |
| Optional Accessories  |                      |   |
| Rack Mount Tray       | SP-RACKTRAY-02       | Rack mount tray for all FortiGate E, F, and G series desktop models are backwards compatible with SP-RackTray-01.                   |
| Mounting Ear Bracket  | SP-EAR-FG90G-10      | Mounting Ear brackets for FWF-50G series and FG-90/91G 10 pairs pack.   |
| Wall Mount Kit        | SP-FG60F-MOUNT-20    | Pack of 20 wall mount kits for FG/FWF-50G series, FG/FWF-60F series , and FG/FWF-80F series.  |
| AC Power Adaptor      | SP-FG-40F-PA-10(-XX) | Pack of 10 AC power adaptors for FWF-50G series and FG/FWF-40F, come with interchangeable power plugs. (XX=various countries code). |
|                       | SP-FG50G-POE-PDC-5   | Pack of 5 AC power adaptors for FG-50/51G-SFP-POE, power cable SP-FGPCOR-XX sold separately.  |
|                       |                      |   |

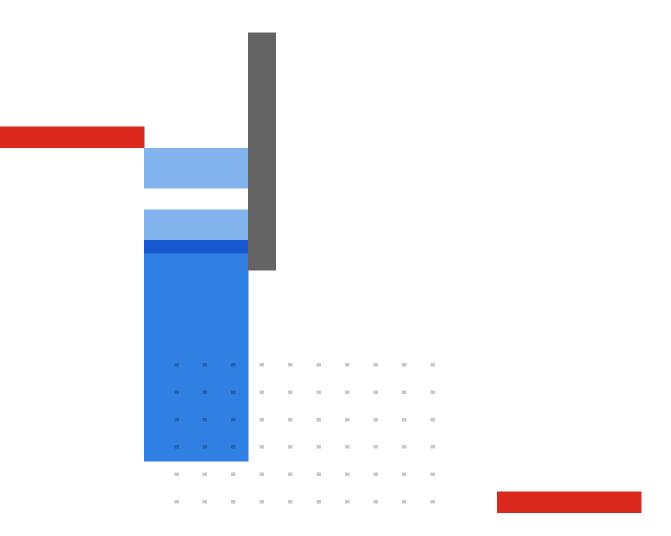
[RC] = regional code: A, B, D, E, F, I, J, N, P , S, V, and Y

Visit <a href="https://www.fortinet.com/resources/ordering-guides">https://www.fortinet.com/resources/ordering-guides</a> for related ordering guides.



#### **Fortinet Corporate Social Responsibility Policy**

Fortinet is committed to driving progress and sustainability for all through cybersecurity, with respect for human rights and ethical business practices, making possible a digital world you can always trust. You represent and warrant to Fortinet that you will not use Fortinet's products and services to engage in, or support in any way, violations or abuses of human rights, including those involving illegal censorship, surveillance, detention, or excessive use of force. Users of Fortinet products are required to comply with the Fortinet EULA and report any suspected violations of the EULA via the procedures outlined in the Fortinet Whistleblower Policy.





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