The FortiGate 50E series offers an excellent Security and SD-WAN solution in a compact fanless desktop form factor for enterprise branch offices and mid-sized businesses. Protect against cyber threats with industry-leading secure SD-WAN in a simple, affordable and easy to deploy solution.

### 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, ICSA, Virus Bulletin and AV Comparatives

### Networking
- Best of Breed SD-WAN capabilities to enable application steering using WAN path control for high quality of experience
- Delivers advanced networking capabilities, high-performance, and scalable IPsec VPN capabilities

### Management
- Includes Management Console that's 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
- Automatically builds Network Topology visualizations which discover IoT devices and provide complete visibility into Fortinet and Fabric-ready partner products

<table>
<thead>
<tr>
<th>Firewall</th>
<th>IPS</th>
<th>NGFW</th>
<th>Threat Protection</th>
<th>Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 Gbps</td>
<td>350 Mbps</td>
<td>220 Mbps</td>
<td>160 Mbps</td>
<td>Multiple GE RJ45</td>
</tr>
</tbody>
</table>
Deployment

**Unified Threat Management (UTM)**

- Integrated wired and wireless networking to simplify IT
- Purpose-built hardware for industry best performance with easy administration through cloud management
- Provides consolidated security and networking for small businesses and consistently provides top-rated threat protection
- Proactively blocks newly discovered sophisticated attacks in real-time with advanced threat protection

**Secure SD-WAN**

- Secure direct Internet access for Cloud Applications for improved latency and reduce WAN cost spending
- High-performance and cost-effective threat protection capabilities
- WAN Path Controller and Link Health Monitoring for better application performance and quality of experience
- Security Processor powered industry’s best IPsec VPN and SSL Inspection performance
- Simplified Management and Zero Touch deployment

---

![FortiGate/FortiWiFi® 50E Series](image-url)
Hardware

FortiGate 50/51/52E

Install in Minutes with FortiExplorer
The FortiExplorer wizard enables easy setup and configuration coupled with easy-to-follow instructions. FortiExplorer runs on popular iOS devices. Using FortiExplorer is as simple as starting the application and connecting to the appropriate USB port on the FortiGate. By using FortiExplorer, you can be up and running and protected in minutes.

Compact and Reliable Form Factor
Designed for small environments, you can simply place the FortiGate/FortiWiFi 50E series on a desktop. It is small, lightweight yet highly reliable with superior MTBF (Mean Time Between Failure), minimizing the chance of a network disruption.

Superior Wireless Coverage
A built-in dual-band, dual-stream access point on the FortiWiFi 50E-2R provides speedy 802.11ac coverage on 2.4 GHz or 5 GHz bands. The dual-band chipset addresses the PCI-DSS compliance requirement for rogue AP wireless scanning.

FortiWiFi 50E/-2R and 51E

Wireless and 3G/4G WAN Extensions
The FortiGate supports external 3G/4G modems that allow additional or redundant WAN connectivity for maximum reliability. The FortiGate can also operate as a wireless access point controller to further extend wireless capabilities.

Interfaces
1. USB Port
2. Console RJ45
3. 2x GE RJ45 WAN Ports
4. 5x GE RJ45 Switch Ports

Interfaces
1. SB Port
2. Console RJ45
3. 2x GE RJ45 WAN Ports
4. 5x GE RJ45 Switch Ports
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.
- Fulfil your networking needs with extensive routing, switching, and SD-WAN capabilities along 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

### Hardware Specifications

<table>
<thead>
<tr>
<th>FG-50E</th>
<th>FWF-50E</th>
<th>FWF-50E-2R</th>
<th>FG-51E</th>
<th>FWF-51E</th>
<th>FG-52E</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE RJ45 Switch Ports</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>GE RJ45 WAN Ports</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>USB Ports</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Console (RJ45)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Wireless Interface

- **Internal Storage**: —
  - 1x 32 GB SSD
- **System Performance — Enterprise Traffic Mix**
  - IPS Throughput 1
  - 350 Mbps
  - NGFW Throughput 2
  - 220 Mbps
  - Threat Protection Throughput 2
  - 160 Mbps

### System Performance

- **Firewall Throughput**: 2.5 Gbps
- **Firewall Latency (64 byte UDP packets)**: 180 μs
- **Firewall Throughput (Packets Per Second)**: 375 Kpps
- **Concurrent Sessions (TCP)**: 1.8 Million
- **New Sessions/Second (TCP)**: 21,000
- **Firewall Policies**: 5,000
- **IPsec VPN Throughput (512 byte)**: 90 Mbps
- **Gateway-to-Gateway IPsec VPN Tunnels**: 200
- **Client-to-Gateway IPsec VPN Tunnels**: 200
- **SSL-VPN Throughput**: 100 Mbps
- **SSL Inspection Throughput (IPS, avg. HTTPS)**
  - 75,000
- **Application Control Throughput (HTTP 64K)**
  - 1.2 Gbps
- **CAPWAP Throughput (HTTP 64K)**
  - 1.2 Gbps
- **Max SSL Inspection Concurrent Session (IPS, avg. HTTPS)**
  - 10,000
- **Max Application Control Throughput (HTTP 64K)**
  - 10,000
- **Virtual Domains (Default / Maximum)**
  - 5 / 5
- **Max Number of FortiSwitches Supported**: 8
- **Max Number of FortiAPs (Total / Tunnel Mode)**
  - 10 / 5
- **Max Number of FortiTokens**: 500
- **Max Number of Registered FortiClients**: 200
- **High Availability Configurations**: Active/Active, Active/Passive, Clustering

### Dimensions

- **Height x Width x Length (inches)**: 1.44 x 8.52 x 5.5
- **Height x Width x Length (mm)**: 36.5 x 216 x 140
- **Weight**: 2.015 lbs (0.914 kg)
- **Form Factor**: Desktop

---

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 values use 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.
### Specifications

#### Operating Environment and Certifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>FG-50E</th>
<th>FWF-50E</th>
<th>FWF-50E-2R</th>
<th>FG-51E</th>
<th>FWF-51E</th>
<th>FG-52E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Required</td>
<td>100–240V AC, 90–50 Hz (External DC Power Adapter)</td>
<td>220V / 0.32A</td>
<td>110V / 0.63A</td>
<td>220V / 0.32A</td>
<td>110V / 0.63A</td>
<td>220V / 0.32A</td>
</tr>
<tr>
<td>Maximum Current</td>
<td>100 V / 0.6 A, 240 V / 0.4 A</td>
<td>100 V / 0.6 A, 240 V / 0.4 A</td>
<td>100 V / 0.6 A, 240 V / 0.4 A</td>
<td>100 V / 0.6 A, 240 V / 0.4 A</td>
<td>100 V / 0.6 A, 240 V / 0.4 A</td>
<td>100 V / 0.6 A, 240 V / 0.4 A</td>
</tr>
<tr>
<td>Power Consumption (Average / Maximum)</td>
<td>15 / 18 W</td>
<td>18 / 22 W</td>
<td>22 / 26 W</td>
<td>18 / 22 W</td>
<td>22 / 26 W</td>
<td>18 / 22 W</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-50 to 70°C</td>
<td>-50 to 70°C</td>
<td>-50 to 70°C</td>
<td>-50 to 70°C</td>
<td>-50 to 70°C</td>
<td>-50 to 70°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C to +70°C</td>
<td>-40°C to +70°C</td>
<td>-40°C to +70°C</td>
<td>-40°C to +70°C</td>
<td>-40°C to +70°C</td>
<td>-40°C to +70°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>10–90% non-condensing</td>
<td>10–90% non-condensing</td>
<td>10–90% non-condensing</td>
<td>10–90% non-condensing</td>
<td>10–90% non-condensing</td>
<td>10–90% non-condensing</td>
</tr>
<tr>
<td>Operating Altitude</td>
<td>Up to 7,400 ft (2,250 m)</td>
<td>Up to 7,400 ft (2,250 m)</td>
<td>Up to 7,400 ft (2,250 m)</td>
<td>Up to 7,400 ft (2,250 m)</td>
<td>Up to 7,400 ft (2,250 m)</td>
<td>Up to 7,400 ft (2,250 m)</td>
</tr>
<tr>
<td>Certifications</td>
<td>ICSA Labs: Firewall, I sandwiches, IPS, Antivirus, SSL, VPN</td>
<td>ICSA Labs: Firewall, I sandwiches, IPS, Antivirus, SSL, VPN</td>
<td>ICSA Labs: Firewall, I sandwiches, IPS, Antivirus, SSL, VPN</td>
<td>ICSA Labs: Firewall, I sandwiches, IPS, Antivirus, SSL, VPN</td>
<td>ICSA Labs: Firewall, I sandwiches, IPS, Antivirus, SSL, VPN</td>
<td>ICSA Labs: Firewall, I sandwiches, IPS, Antivirus, SSL, VPN</td>
</tr>
</tbody>
</table>

#### Order Information

<table>
<thead>
<tr>
<th>Product</th>
<th>SKU</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FortiGate 50E</td>
<td>FG-50E</td>
<td>7x GE RJ45 ports (including 2x WAN ports, 5x Switch ports), maximum managed FortiAPs (Total / Tunnel) 10 / 5.</td>
</tr>
<tr>
<td>FortiWiFi 50E</td>
<td>FWF-50E</td>
<td>7x GE RJ45 ports (including 2x WAN ports, 5x switch ports), Wireless (802.11a/b/g/n), maximum managed FortiAPs (Total / Tunnel) 10 / 5.</td>
</tr>
<tr>
<td>FortiWiFi 50E-2R</td>
<td>FWF-50E-2R</td>
<td>7x GE RJ45 ports (including 2x WAN ports, 5x switch ports), dual radio wireless (802.11a/b/g/n/ac), maximum managed FortiAPs (Total / Tunnel) 10 / 5.</td>
</tr>
<tr>
<td>FortiGate 51E</td>
<td>FG-51E</td>
<td>7x GE RJ45 ports (including 2x WAN ports, 5x switch ports), 32 GB SSD onboard storage, maximum managed FortiAPs (Total / Tunnel) 10 / 5.</td>
</tr>
<tr>
<td>FortiWiFi 51E</td>
<td>FWF-51E</td>
<td>7x GE RJ45 ports (including 2x WAN ports, 5x switch ports), Wireless (802.11a/b/g/n), 32 GB SSD onboard storage, maximum managed FortiAPs (Total / Tunnel) 10 / 5.</td>
</tr>
<tr>
<td>FortiGate 52E</td>
<td>FG-52E</td>
<td>7x GE RJ45 ports (including 2x WAN ports, 5x Switch ports), 2x 32 GB SSD onboard storage, maximum managed FortiAPs (Total / Tunnel) 10 / 5.</td>
</tr>
</tbody>
</table>

### Bundles

#### FortiGuard Bundle

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>AAE</td>
<td>24/7</td>
<td>24/7</td>
<td>24/7</td>
</tr>
<tr>
<td>FortiGuard App Control Service</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>FortiGuard IPS Service</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</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>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>FortiGuard Web Filtering Service</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>FortiGuard Antispam Service</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>FortiGuard Security Rating Service</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>FortiGuard Industrial Service</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>FortiCASB Saas-only Service</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>FortiConverter Service</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>SD-WAN Cloud Assisted Monitoring</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>SD-WAN Overlay Controller VPN Service</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>FortiAnalyzer Cloud 1</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>FortiManager Cloud 2</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

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

---

www.fortinet.com

Copyright © 2019 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, FortiCare® and FortiGuard®, and certain other marks are registered trademarks of Fortinet, Inc., and other Fortinet marks herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein are obtained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet’s General Counsel, with a purchaser that expressly warrants that the identified product will perform according to certain expressly-identified performance metrics and, in such event, only the specific performance metrics expressly identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet’s internal lab tests. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.