# FERTINET

# DATA SHEET FortiGate<sup>®</sup> 400E-BYPASS

FortiGate 400E-BYPASS

Next Generation Firewall Secure SD-WAN Secure Web Gateway



The FortiGate 400E-BYPASS provides an application-centric, scalable, and secure SD-WAN solution with Next Generation Firewall (NGFW) capabilities for mid-sized to large enterprises deployed at the campus or branch level. Protects against cyber threats with system-on-a-chip acceleration and industry-leading secure SD-WAN in a simple, affordable, and easy to deploy solution. Fortinet's Security-Driven Networking approach provides tight integration of the network to the new generation of security.

#### 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
- Prevents and detects against known attacks using continuous threat intelligence from AI-powered FortiGuard Labs security services
- Proactively blocks unknown sophisticated attacks in realtime with the Fortinet Security Fabric integrated AI-powered FortiSandbox

#### Performance

- Engineered for Innovation using Fortinet's purpose-built security processors (SPU) to deliver the industry's best threat protection performance and ultra-low latency
- Provides industry-leading performance and protection for SSL encrypted traffic including the first firewall vendor to provide TLS 1.3 deep inspection

#### 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

- Dynamic Path Selection over any WAN transport to provide better application experience based on self-healing SD-WAN capabilities
- Advanced routing, scalable VPN, multi-cast, and IPV4/IPV6 forwarding powered by purpose-built network processors

#### Management

- SD-WAN orchestration provides intuitive and simplified workflow for centralized management and provisioning of business policies in a few easy clicks
- Expedited deployment with zero touch provisioning well-suited for large and distributed infrastructure
- Automated VPN tunnels for flexible hub-to-spoke and full-mesh deployment at scale to provide bandwidth aggregation and encrypted WAN paths
- Predefined compliance checklists analyze the deployment and highlight best practices to improve the 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

Firewall	IPS	NGFW	Threat Protection	Interfaces
36 Mpps	6.5 Gbps	5.5 Gbps	4 Gbps	Multiple GE RJ45 bypass port pairs

### Deployment

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### Next Generation Firewall (NGFW)

- Reduce the complexity and maximize your ROI by integrating threat protection security capabilities into a single highperformance network security appliance, powered by Fortinet's Security Processing Unit (SPU)
- Full visibility into users, devices, and applications across the entire attack surface, and consistent security policy enforcement irrespective of asset location
- Protect against network exploitable vulnerabilities with industryvalidated IPS that offers low latency and optimized network performance
- Automatically block threats on decrypted traffic using the industry's highest SSL inspection performance, including the latest TLS 1.3 standard with mandated ciphers
- Proactively block newly discovered sophisticated attacks in real-time with Al-powered FortiGuard Labs and advanced threat protection services included in the Fortinet Security Fabric

### Secure Web Gateway (SWG)

- Secure web access from both internal and external risks, even for encrypted traffic at high performance
- Enhanced user experience with dynamic web and video caching
- Block and control web access based on user or user groups across URLs and domains
- Prevent data loss and discover user activity to known and unknown cloud applications
- Block DNS requests against malicious domains
- Multi-layered advanced protection against zero-day malware threats delivered over the web



FortiGate 400E-BYPASS deployment in Campus (NGFW)



### Secure SD-WAN

- Consistent business application performance with accurate detection, dynamic WAN path steering on any best-performing WAN transport
- Accelerated multi-cloud access for faster SaaS adoption with cloud-on-ramp
- Self-healing networks with WAN edge high availability, subsecond traffic switchover-based and real-time bandwidth compute-based traffic steering
- Automated overlay tunnels provides encryption and abstracts physical hybrid WAN making it simple to manage.
- Simplified and intuitive workflow with SD-WAN orchestrator for management and zero touch deployment
- Enhanced analytics both real-time and historical provides visibility into network performance and identifies anomalies
- Strong security posture with next generation firewall and realtime threat protection



FortiGate 400E-BYPASS SWG deployment



FortiGate 400E-BYPASS deployment in Enterprise Branch (Secure SD-WAN)

### Hardware

### FortiGate 400E-BYPASS



#### Interfaces

(1)	2x GE	RJ45	MGMT/HA	A ports

(2) 16x GE RJ45 Bypass port pairs

### Powered by SPU

 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

#### **Bypass Interfaces**

The FortiGate 400E includes 16 pairs of bypass ports that provide fail-open support. In the event of a hardware failure, power loss, or bypass mode is enabled, the bypass ports will maintain network connectivity and traffic will continue uninterrupted.

NPe

CP9

10

Bypa

#### **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 two microseconds
- VPN, CAPWAP, and IP tunnel acceleration
- Anomaly-based intrusion prevention, checksum offload, and packet defragmentation
- Traffic shaping and priority queuing

#### **Content Processor**

Fortinet's new, breakthrough SPU CP9 content processor works outside of the direct flow of traffic and accelerates the inspection of computationally intensive security features:

- Enhanced IPS performance with unique capability of full signature matching at ASIC
- SSL inspection capabilities based on the latest industry mandated cipher suites
- Encryption and decryption offloading

### **Fortinet Security Fabric**

### **Security Fabric**

The Security Fabric is the cybersecurity platform that enables digital innovations. It delivers broad visibility of the entire attack surface to better manage risk. Its unified and integrated solution reduces the complexity of supporting multiple-point products, while automated workflows increase operational speeds and reduce response times across the Fortinet deployment ecosystem. The Fortinet Security Fabric overs the following key areas under a single management center:

- Security-Driven Networking that secures, accelerates, and unifies the network and user experience
- Zero Trust Network Access that identifies and secures users and devices in real-time, on and off of the network
- Dynamic Cloud Security that protects and controls cloud infrastructures and applications
- AI-Driven Security Operations that automatically prevents, detects, isolates, and responds to cyber threats

### **FortiOS**

FortiGates are the foundation of the Fortinet Security Fabric-the core is FortiOS. All security and networking capabilities across the entire FortiGate platform are controlled with one intuitive operating system. FortiOS reduces complexity, costs, and response times by truly consolidating next-generation security products and services into one platform.

- A truly consolidated platform with a single OS and pane-of-glass for across the entire digital attack surface
- Industry-leading protection: NSS Labs Recommended, VB100, AV Comparatives, and ICSA validated security and performance
- Leverage the latest technologies such as deception-based security

# Fabrio Managemen Center Open Fabric Ecosystem O -•)) Cloud Secure WLAN/LAN NGFW </> Endpoint Security Operation

- 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
- Automatically prevent, detect, and mitigate advanced attacks within minutes with an integrated AI-driven security and advanced threat protection
- Improve and unify the user experience with innovative SD-WAN capabilities with the ability to detect, contain, and isolate threats with automated segmentation
- Utilize SPU hardware acceleration to boost network security performance

### Services



#### FortiGuard<sup>™</sup> **Security Services**

FortiGuard Labs offer 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<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.

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## **Specifications**

	FORTIGATE 400E-BYPASS			
Interfaces and Modules				
GE RJ45 Bypass port pairs (16 bypass pairs)	32			
GE RJ45 Management/HA Ports	2			
USB Ports	2			
RJ45 Console Port	1			
System Performance — Enterprise Traffic Mix				
IPS Throughput <sup>2</sup>	6.5 Gbps			
NGFW Throughput <sup>2, 4</sup>	5.5 Gbps			
Threat Protection Throughput <sup>2,5</sup>	4 Gbps			
System Performance and Capacity				
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)	32 / 32 / 24 Gbps			
IPv6 Firewall Throughput (1518 / 512 / 64 byte, UDP)	32 / 32 / 24 Gbps			
Firewall Latency (64 byte, UDP)	2.22 µs			
Firewall Throughput (Packet per Second)	36 Mpps			
Concurrent Sessions (TCP)	3.5 Million			
New Sessions/Second (TCP)	310,000			
Firewall Policies	10,000			
IPsec VPN Throughput (512 byte) <sup>1</sup>	20 Gbps			
Gateway-to-Gateway IPsec VPN Tunnels	2,000			
Client-to-Gateway IPsec VPN Tunnels	50,000			
SSL-VPN Throughput	4.5 Gbps			
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)	500			
SSL Inspection Throughput (IPS, avg. HTTPS) <sup>3</sup>	4.8 Gbps			
SSL Inspection CPS (IPS, avg. HTTPS) <sup>3</sup>	3,900			
SSL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>	300,000			
Application Control Throughput (HTTP 64K) <sup>2</sup>	12 Gbps			
CAPWAP Throughput (1444 byte, UDP)	20 Gbps			
Virtual Domains (Default / Maximum)	10 / 10			
Maximum Number of FortiSwitches Supported	72			
Maximum Number of FortiAPs (Total / Tunnel)	512 / 256			
Maximum Number of FortiTokens	5,000			
High Availability Configurations	Active-Active, Active-Passive, Clustering			

	FORTIGATE 400E-BYPASS			
Dimensions and Power				
Height x Width x Length (inches)	1.75 x 17.0 x 16.91			
Height x Width x Length (mm)	44.45 x 432 x 429.4			
Weight	19.72 lbs (8.95 kg)			
Form Factor (supports EIA / non-EIA standards)	Rack Mount, 1 RU			
AC Power Consumption (Average / Maximum)	112 W / 214 W			
AC Power Input	100–240V, 50/60Hz			
AC Current (Maximum)	6A			
Heat Dissipation	730 BTU/h			
Redundant Power Supplies (Hot Swappable)	Yes			
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	48 dBA			
Operating Altitude	Up to 7,400 ft (2,250 m)*			
Compliance	FCC Part 15 Class A, RCM, VCCI, CE, UL/cUL, CB			
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN; USGv6/IPv6			

\* Operating at maximum temperature derates 1.5°C per 1000ft (305m)

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.



### **Order Information**

Product	SKU	Description
FortiGate 400E-BYPASS	FG-400E-BYPASS	32 x 10/100/1000 RJ45 (16 bypass pairs) ports, 1 x MGMT, 1 x HA, dual AC power supplies
Optional Accessories		
Optional Power Supply	SP-FG300E-PS	AC power supply for FG-300/301E, FG-400/401E, FG-500/501E, FG-600/601E, FAZ-200F/300F/800F and FMG-200F/300F.

### **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.

Bundles	360 Protection	Enterprise Protection	Unified Threat Protection	Threat Protection
FortiCare	ASE 1	24x7	24x7	24x7
FortiGuard App Control Service	•	٠	•	٠
FortiGuard IPS Service	•	•	•	٠
FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	•
FortiGuard Web Filtering Service	•	٠	•	
FortiGuard Antispam Service	•	٠	•	
FortiGuard Security Rating Service	•	•		
FortiGuard Industrial Service	•	٠		
FortiGuard IoT Detection Service <sup>2</sup>	•	•		
FortiConverter Service	•	•		
IPAM Cloud <sup>2</sup>	•			
SD-WAN Orchestrator Entitlement <sup>2</sup>	•			
SD-WAN Cloud Assisted Monitoring	•			
SD-WAN Overlay Controller VPN Service	•			
FortiAnalyzer Cloud	•			
FortiManager Cloud	•			

(1) 24x7 plus Advanced Services Ticket Handling (2) Available when running FortiOS 6.4



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