DATA SHEET

FortiGate® 400E Series

FortiGate 400E, 401E and 401E-DC

Next Generation Firewall
Secure SD-WAN
Secure Web Gateway

The FortiGate 400E series 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 real-time 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 work-flow 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
32 Gbps	**7.8 Gbps**	**6 Gbps**	**5 Gbps**	Multiple GE RJ45 and GE SFP Slots | DC Variant

Refer to the specifications table for details

Deployment

Next Generation Firewall (NGFW)

- Reduce the complexity and maximize your ROI by integrating threat protection security capabilities into a single high-performance 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 industry-validated 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 AI-powered FortiGuard Labs and advanced threat protection services included in the Fortinet Security Fabric

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, sub-second 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 real-time threat protection

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 SWG deployment

FortiGate 400E deployment in Campus (NGFW)

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

Hardware

FortiGate 400E/401E

Interfaces

(1) 1x USB Port
(2) 1x Console Port
(3) 2x GE RJ45 MGMT/HA Ports
(4) 16x GE RJ45 Ports
(5) 16x GE SFP Slots

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

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
- 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™ 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™ 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

	FORTIGATE 400E	FORTIGATE 401E/-DC
Interfaces and Modules		
GE RJ45 Interfaces	16	
GE SFP Slots	16	
GE RJ45 Management Ports	2	
USB Ports	2	
RJ45 Console Port	1	
Local Storage	–	2x 240 GB SSD
Included Transceivers	2x SFP (SX 1 GE)	
System Performance — Enterprise Traffic Mix		
IPS Throughput [2]	7.8 Gbps	
NGFW Throughput [2, 4]	6 Gbps	
Threat Protection Throughput [2, 5]	5 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)	2.14 µs	
Firewall Throughput (Packet per Second)	36 Mpps	
Concurrent Sessions (TCP)	4 Million	
New Sessions/Second (TCP)	450,000	
Firewall Policies	10,000	
IPsec VPN Throughput (512 byte) [1]	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)	5,000	
SSL Inspection Throughput (IPS, avg. HTTPS) [3]	4.8 Gbps	
SSL Inspection CPS (IPS, avg. HTTPS) [3]	4,000	
SSL Inspection Concurrent Session (IPS, avg. HTTPS) [3]	300,000	
Application Control Throughput (HTTP 64K) [2]	12 Gbps	
CAPWAP Throughput (1444 byte, UDP)	14.8 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	FORTIGATE 401E/-DC
Dimensions and Power		
Height x Width x Length (inches)	1.75 x 17.0 x 15.0	
Height x Width x Length (mm)	44.45 x 432 x 380	
Weight	16.4 lbs (7.4 kg)	16.9 lbs (7.9 kg)
Form Factor (supports EIA / non-EIA standards)	Rack Mount, 1 RU	
AC Power Consumption (Average / Maximum)	109W / 214W	115W / 221W
AC Power Input	100–240V AC, 50/60Hz	
AC Current (Maximum)	6A	
DC Power Input		-48V to -60V DC
DC Current (Maximum)		11.5A
DC Current (Nominal)		4.6A
DC Power Consumption (Average / Maximum)		115W / 221W
Heat Dissipation	730 BTU/h	754 BTU/h
Redundant Power Supplies (Hot Swappable)	optional	
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	

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	FG-400E	18x GE RJ45 ports (including 1x MGMT port, 1x HA port, 16x switch ports), 16x GE SFP slots, SPU NP6 and CP9 hardware accelerated.
FortiGate 401E	FG-401E	18x GE RJ45 ports (including 1x MGMT port, 1x HA port, 16x switch ports), 16x GE SFP slots, SPU NP6 and CP9 hardware accelerated, 2x 240 GB onboard SSD storage.
FortiGate 401E-DC	FG-401E-DC	18 x GE RJ45 ports (including 1 x MGMT port, 1 X HA port, 16 x switch ports), 16 x GE SFP slots, SPU NP6 and CP9 hardware accelerated, 2x 240GB onboard SSD storage, 1 DC power supply
Optional Accessories		
1 GE SFP LX Transceiver Module	FN-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP RJ45 Transceiver Module	FN-TRAN-GC	1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+slots.
1 GE SFP SX Transceiver Module	FN-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.
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..
DC Power Supply	SP-FG300E-DC-PS	DC power supply for FG-401E-DC and FG-1100E-DC

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.

Bundles	360 Protection	Enterprise Protection	Unified Threat Protection	Threat Protection
FortiCare	ASE [1]	24x7	24x7	24x7
FortiGuard App Control Service	•	•	•	•
FortiGuard IPS Service	•	•	•	•
FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	•
FortiGuard Web Filtering Service	•	•	•	
FortiGuard Antispam Service	•	•	•	
FortiGuard Security Rating Service	•	•		
FortiGuard Industrial Service	•	•		
FortiGuard IoT Detection Service [2]	•	•		
FortiConverter Service	•	•		
IPAM Cloud [2]	•			
SD-WAN Orchestrator Entitlement [2]	•			
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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