FORTINET®

FortiGate® 3800D Series

FortiGate 3800D/-DC, 3810D/-DC and 3815D/-DC

**Next Generation Firewall
Segmentation
IPS
Mobile Security**

The FortiGate 3800D 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 3800D 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

Networking
- 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

Firewall	IPS	NGFW	Threat Protection	Interfaces
320 Gbps	**30 Gbps**	**20 Gbps**	**13 Gbps**	Multiple 100 GE CFP2, 40 GE QSFP+, 10 GE SFP+ and/or multiple GE SFP/RJ45 depending on variants

Refer to specification table for details

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)
- User plane security enabled by full Threat Protection and visibility into GTP-U inspection
- Signaling security to inspect various protocols such as SCTP, Diameter, GTP-C, SIP and provide protection against attacks
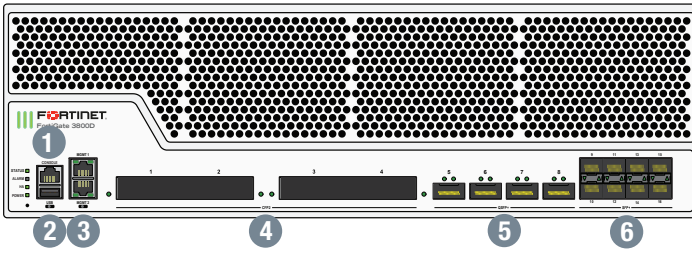- High-speed interfaces to enable deployment flexibility
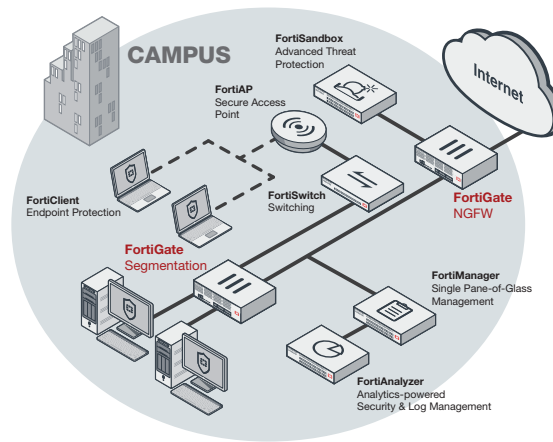
FortiGate 3800D series deployment in large campus networks (NGFW, Intent-based Segmentation)

FortiGate 3800D series deployment in data center (IPS/NGFW, Intent-based Segmentation)
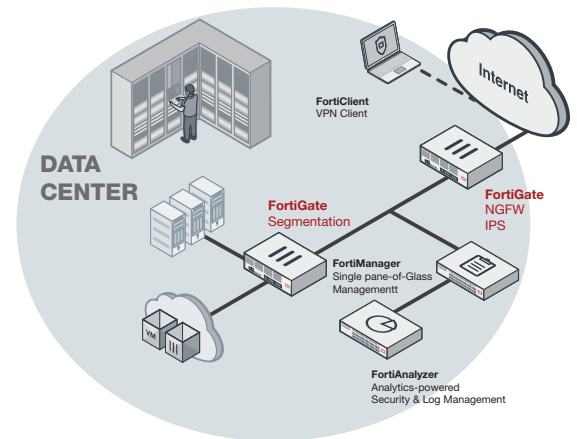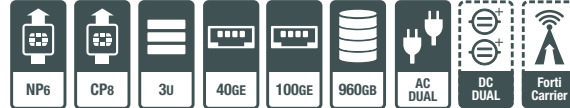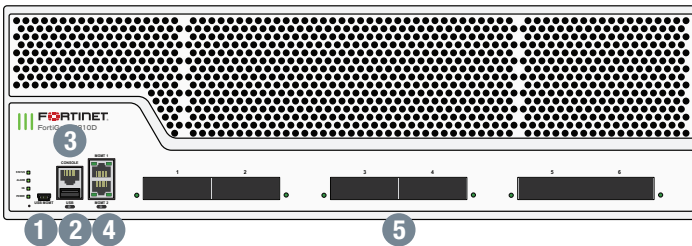
Hardware

FortiGate 3800D/-DC

Interfaces

1. Console Port
2. USB Port
3. 2x GE RJ45 Management Ports
4. 4x 100 GE CFP2 Slots
5. 4x 40 GE QSFP+ Slots
6. 8x 10 GE SFP+/GE SFP Slots

| NP6 | CP8 | 3U | 40GE | 100GE | 960GB | AC DUAL | DC DUAL | Forti Carrier |

FortiGate 3810D/-DC

Interfaces

1. USB Management Port
2. USB Port
3. Console Port
4. 2x GE RJ45 Management Ports
5. 6x 100 GE CFP2 Slots
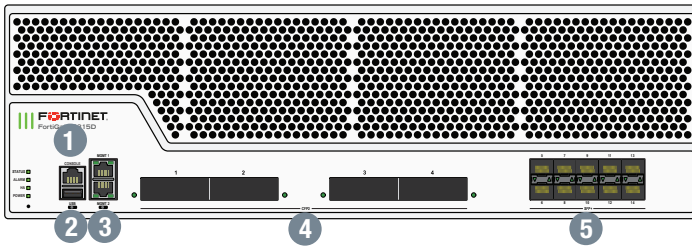
| NP6 | CP8 | 3U | 100GE | 960GB | AC DUAL | NEBS | DC DUAL | Forti Carrier |

FortiGate 3815D/-DC

Interfaces

1. Console Port
2. USB Port
3. 2x GE RJ45 Management Ports
4. 4x 100 GE CFP2 Slots
5. 10x 10 GE SFP+ Slots

| NP6 | CP8 | 3U | 100GE | 960GB | AC DUAL | NEBS | DC DUAL | Forti Carrier |

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 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 ties 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.
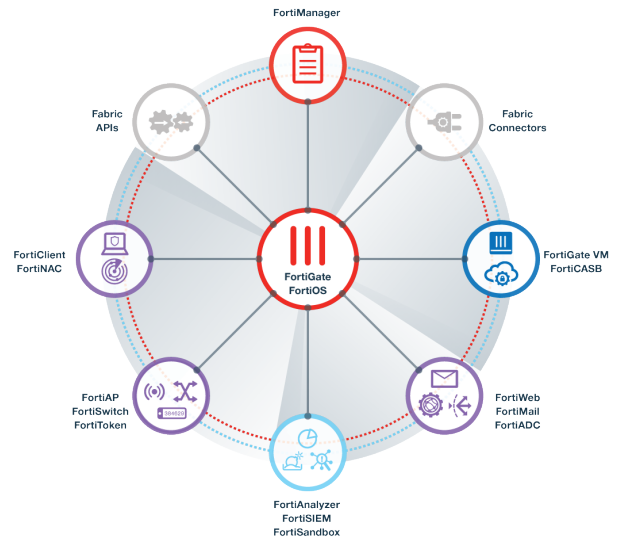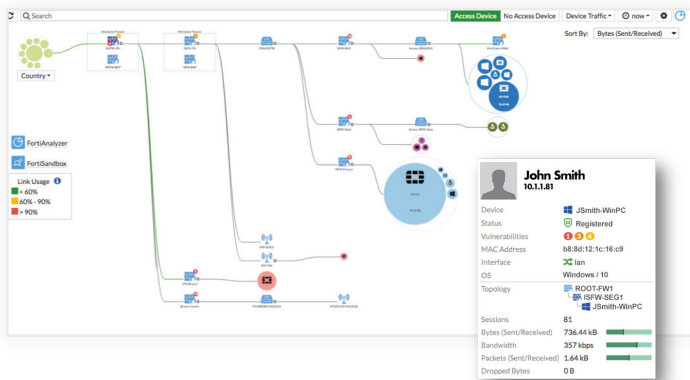
- A truly consolidated platform with a single OS and pane-of-glass for all security and networking services across all FortiGate platforms.
- Industry-leading protection: NSS Labs Recommended, VB100, AV Comparatives, and ICSA validated security and performance. Ability to leverage latest technologies 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

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Specifications

	FG-3800D AND 3800D-DC	FG-3810D AND 3810D-DC	FG-3815D AND 3815D-DC
Interfaces and Modules			
100 GE CFP2 Slots	4	6	4
40 GE QSFP+ Slots	4	–	–
10 GE SFP+ Slots	8 (supports GE SFP as well)	–	10
GE RJ45 Management Ports	2	2	2
USB Ports	1	1	1
Console Port	1	1	1
Internal Storage	2x 480 GB SSD	2x 480 GB SSD	2x 480 GB SSD
Included Transceivers	2x SFP+ (SR 10 GE)	NIL	2x SFP+ (SR 10 GE)
System Performance — Enterprise Traffic Mix			
IPS Throughput [2]		30 Gbps	
NGFW Throughput [2, 4]		20 Gbps	
Threat Protection Throughput [2, 5]		13 Gbps	
System Performance and Capacity			
Firewall Throughput (1518 / 512 / 64 byte, UDP)		320 / 300 / 150 Gbps	
Firewall Latency (64 byte, UDP)		5 µs	
Firewall Throughput (Packet per Second)		262.5 Mpps	
Concurrent Sessions (TCP)		95 Million	
New Sessions/Sec (TCP)		480,000	
Firewall Policies		200,000	
IPsec VPN Throughput (512 byte) [1]		135 Gbps	
Gateway-to-Gateway IPsec VPN Tunnels		40,000	
Client-to-Gateway IPsec VPN Tunnels		200,000	
SSL-VPN Throughput		10 Gbps	
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)		30,000	
SSL Inspection Throughput (IPS, avg. HTTPS) [3]		14.4 Gbps	
SSL Inspection CPS (IPS, avg. HTTPS) [3]		9,000	
SSL Inspection Concurrent Session (IPS, avg. HTTPS) [3]		7 Million	
Application Control Throughput (HTTP 64K) [2]		44 Gbps	
CAPWAP Throughput (1444 byte, UDP)		22 Gbps	
Virtual Domains (Default / Maximum)		10 / 500	
Maximum Number of FortiSwitches Supported		256	
Maximum Number of FortiAPs (Total / Tunnel Mode)		4,096 / 1,024	
Maximum Number of FortiTokens		20,000	
Maximum Number of Registered FortiClients		100,000	
High Availability Configurations		Active / Active, Active / Passive, Clustering	
Dimensions and Power			
Height x Width x Length (inches)	5.2 x 17.4 x 26.5	5.2 x 17.4 x 26.5	5.2 x 17.4 x 26.5
Height x Width x Length (mm)	133 x 442 x 673	133 x 442 x 673	133 x 442 x 673
Weight	51 lbs (23.0 kg)	59 lbs (26.8 kg)	59 lbs (26.8 kg)
Form Factor	3 RU	3 RU	3 RU
AC Power Supply	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
DC Power Supply	40–72V DC	48–72V DC	48–72V DC
Power Consumption (Average / Maximum)	537.6 / 748.8 W	832 / 1100 W	829 / 1100 W
Current (Maximum)	12A@100V, 5A@240V	12A@100V, 5A@240V	12A@100V, 5A@240V
Heat Dissipation	2,560 BTU/h	3,754 BTU/h	3,754 BTU/h
Redundant Power Supplies	Yes, Hot Swappable	Yes, Hot Swappable	Yes, Hot Swappable

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

	FG-3800D AND 3800D-DC	FG-3810D AND 3810D-DC	FG-3815D AND 3815D-DC
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		60 dBA	
Operating Altitude		Up to 7,400 ft (2,250 m)	
Compliance		FCC Part 15 Class A, C-Tick, VCCI, CE, UL/cUL, CB	
Certifications		ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN; USGv6/IPv6	
NEBS Certified	–	Yes	Yes

Order Information

Product	SKU	Description
FortiGate 3800D	FG-3800D	4x 100 GE CFP2 slots, 4x 40 GE QSFP+ slots, 8x 10 GE SFP+ slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB onboard storage, and dual AC power supplies.
FortiGate 3800D-DC	FG-3800D-DC	4x 100 GE CFP2 slots, 4x 40 GE QSFP+ slots, 8x 10 GE SFP+ slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB onboard storage, and dual DC power supplies.
FortiGate 3810D	FG-3810D	6x 100 GE LR4/SR10 CFP2 slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB SSD onboard storage, dual AC power supplies.
FortiGate-3810D-NEBS	FG-3810D-NEBS	6x 100 GE LR4/SR10 CFP2 slots, 2x GE RJ45 Management ports, 960 GB SSD onboard storage, dual AC power supplies. NEBS Certified.
FortiGate 3810D-DC	FG-3810D-DC	6x 100 GE LR4/SR10 CFP2 slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB SSD onboard storage, dual DC power supplies.
FortiGate-3810D-DC-NEBS	FG-3810D-DC-NEBS	4x 100 G CFP2 slots, 4x 40 G QSFP+ slots, and 8x 10 G SFP+ slots, 2x GE RJ45 Management, SPU NP6 and CP8 hardware accelerated, 960 GB onboard storage, and dual DC power supplies. NEBS Certified.
FortiGate 3815D	FG-3815D	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB SSD onboard storage, and dual AC power supplies.
FortiGate-3815D-NEBS	FG-3815D-NEBS	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management ports, 960 GB SSD onboard storage, and dual AC power supplies. NEBS Certified.
FortiGate 3815D-DC	FG-3815D-DC	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB SSD onboard storage, and dual DC power supplies.
FortiGate-3815D-DC-NEBS	FG-3815D-DC-NEBS	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management ports, 960 GB SSD onboard storage, and dual DC power supplies. NEBS Certified.
Optional Accessories	**SKU**	**Description**
100 GE CFP2 Transceivers, Short Range	FG-TRAN-CFP2-SR10	100 GE CFP2 transceivers, 10 channel parallel fiber, short range for all systems with CFP2 slots.
100 GE CFP2 Transceivers, Long Range	FG-TRAN-CFP2-LR4	100 GE CFP2 transceivers, long range, over single mode fiber, for all systems with CFP2 slots.
10 GE SFP+ Transceiver Module, Short Range	FG-TRAN-SFP+SR	10 GE SFP+ transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Transceiver Module, Long Range	FG-TRAN-SFP+LR	10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.
10 GE Copper SFP+ Transceiver Module, up to 30m	FS-TRAN-SFP+GC	10 GE copper SFP+ RJ45 transceiver. For FortiSwitch only, up to 30m.
1 GE SFP LX Transceiver Module	FG-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP RJ45 Transceiver Module	FG-TRAN-GC	1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP SX Transceiver Module	FG-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.
100 GE SR10 to 10x 10 GE Fan Out Cable	FG-CABLE-SR10-SFP+	100 GE SR10 to 10x 10 GE SFP+ 1M fan out cable.
AC Power Supply	SP-FG3800D-PS	AC power supply for FG-3700D, FG-3700D-NEBS, FG-3700DX, FG-3810D and FG-3815D.
DC Power Supply	SP-FG3800D-DC-PS	DC power supply for FG-3700D-DC, FG-3700D-DC-NEBS, FG-3810D-DC, FG-3815D-DC.
Rack Mount Sliding Rails	SP-FG3040B-RAIL	Rack mount sliding rails for FG-1000C/-DC, FG-1200D, FG-1500D/DC, FG-3040B/-DC, FG-3140B/-DC, FG-3240C/-DC, FG-3000D/-DC, FG-3100D/-DC, FG-3200D/-DC, FG-3700D/-DC, FG-3700DX, FG-3810D/-DC and FG-3950B/-D.

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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	UTM	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	•	•		
FortiCASB SaaS-only Service	•	•		
FortiConverter Service	•			
SD-WAN Cloud Assisted Monitoring [2]	•			
SD-WAN Overlay Controller VPN Service [2]	•			
FortiAnalyzer Cloud [2]	•			
FortiManager Cloud [2]	•			

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

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