

# PREGÃO PRESENCIAL Nº 28/2023 ANEXO II MODELO DE PROPOSTA DE PREÇOS

## À ASSEMBLEIA LEGISLATIVA DO ESTADO DA PARAÍBA

Proposta para atendimento do objeto destinado a Assembleia Legislativa da Paraíba, em conformidade com o Edital de Pregão Presencial **nº 28/2023**, autorizado pelo Processo Administrativo **nº 3244/2023**.

Para tanto, oferecemos a este Poder Legislativo o preço para o item abaixo, observadas as exigências e especificações de que tratam o **ANEXO I – TERMO DE REFERÊNCIA.** 

LOTE	ITEM		Qtd	Unidade	Valor Unitário	Valor Total Mensal	Valor Total Anual
	01	Solução de Segurança de Redes NGFW TIPO 1 com 60 meses de atualização de firmware, atualização automática bases de dados, suporte e garantia do fabricante. FABRICANTE: FORTINET MODELO: FG-100F Atendendo todos os itens do termo de referência	02	Assinatura	R\$ 3.045,00	R\$ 6.090,00	R\$ 73.080,00
	02	Solução de Segurança de Redes NGFW TIPO 2 com 60 meses de atualização de firmware, atualização automática de bases de dados, suporte e garantia do fabricante. FABRICANTE: FORTINET MODELO: FG-60F Atendendo todos os itens do termo de referência	02	Assinatura	R\$ 1.815,00	R\$ 3.630,00	R\$ 43.560,00
02	03	Serviços de solução de controle de acesso a rede (NAC) com 60 meses de atualização de firmware, atualização automática de bases de dados, suporte e garantia do fabricante. FABRICANTE: FORTINET MODELO: FWB-400E Atendendo todos os itens do termo de referência	01	Assinatura	R\$ 14.700,00	R\$ 14.700,00	R\$ 176.400,00
)	04	Solução de segurança de aplicações WEB e API - Firewall de Aplicação (WAF) com 60 meses de atualização de firmware, atualização automática bases de dados, suporte e garantia do fabricante. FABRICANTE: FORTINET MODELO: FNC-CA-VM Atendendo todos os itens do termo de referência  VALORES TOTAIS MEN			R\$ 2.680,00	R\$ 2.680,00	R\$ 32.160,00



A validade da presente proposta é de 60 (sessenta) dias corridos, contados da sua abertura, observado o disposto no *caput* e parágrafo único do art. 110 da Lei no 8.666/93.

Os preços ofertados já incluem a entrega e retirada dos itens no local determinado.

Informamos, por oportuno, que no preço estão incluídos todos os custos diretos e indiretos para o perfeito fornecimento do objeto, inclusive os encargos da legislação social, trabalhista, previdenciária, englobando tudo o que for necessário para a execução total e completa do objeto licitado, conforme especificações constantes no Edital e seus Anexos.

Os dados da nossa empresa são:

EMPRESA: TELTEC SOLUTIONS	CNPJ: 04.892.991/00	001-15
LTDA	3111 31 3 1.332.33 1/30	001-10
INSCRIÇÃO ESTADUAL: 254.353.290	INSCRIÇÃO MUNICI	PAI · 417 510-7
OPTANTE PELO SIMPLES : NÃO		
ENDEREÇO: RUA MIGUEL DAUX, 100 -	- COQUEIROS - FLORI	ANÓPOLIS/SC
FONE/FAX: (48) 3031-3450 / (65) 98126	-6811	71101 OLIO/3C
E-MAIL: teltec@teltecsolutions.com.br /	SITE: www.teltecsolution	one com hr
ana@teltecsolutions.com.br	in an investigation	ons.com.pr
D	ADOS BANCARIOS	
BANCO: BRASIL	AGÊNCIA: 3077-5	CONTA: 7555-8
		- TOOU-0

# 04 892 991/0001-15

## **TELTEC SOLUTIONS LTDA**

Rua: Miguel Daux, 100

COQUEIROS - CEP 88080-220 FLORIANÓPOLIS - SC

Declaramos, para todos os fins, que o fornecimento do objeto se dará de acordo com as especificações definidas nesta proposta e respeitando o estabelecido no Edital e seus Anexos.

João Pessoa, 12 de dezembro de 2023.

Lucas Silvino da Silva RG 2509339 SSP/PB CPF 051.748.624-52

152

LEGISLA

Visto

C.P.L



## PREGÃO PRESENCIAL Nº 28/2023 ANEXO II MODELO DE PROPOSTA DE PREÇOS

## À ASSEMBLEIA LEGISLATIVA DO ESTADO DA PARAÍBA

Proposta para atendimento do objeto destinado a Assembleia Legislativa da Paraíba, em conformidade com o Edital de Pregão Presencial nº 28/2023, autorizado pelo Processo Administrativo nº 3244/2023.

Para tanto, oferecemos a este Poder Legislativo o preço para o item abaixo, observadas as exigências e especificações de que tratam o ANEXO I - TERMO DE REFERÊNCIA.

LOTE	ITEM	Descrição serviço	Qtd	Unidade	Valor Unitário	Valor Total Mensal	Valor Total Anual
	01	Solução de Segurança de Redes NGFW TIPO 1 com 60 meses de atualização de firmware, atualização automática de bases de dados, suporte e garantia do fabricante. FABRICANTE: FORTINET MODELO: FG-100F Atendendo todos os itens do termo de referência	1	<b>Assinatura</b>	R\$ 11.000,00	R\$ 22.000,00	R\$ 264.000,00
	02	Solução de Segurança de Redes NGFW TIPO 2 com 60 meses de atualização de firmware, atualização automática de bases de dados, suporte e garantia do fabricante. FABRICANTE: FORTINET MODELO: FG-60F Atendendo todos os itens do termo de referência		Assinatura	R\$ 6.000,00	<b>R\$</b> 12.000,00	R\$ 144.000,00
02	03	Serviços de solução de controle de acesso a rede (NAC) com 60 meses de atualização de firmware, atualização automática de bases de dados, suporte e garantia do fabricante. FABRICANTE: FORTINET MODELO: FWB-400E Atendendo todos os itens do termo de referência	01	Assinatura	R\$ 16.000,00	R\$ 16.000,00	<b>R\$</b> 192.000,00
	04	Solução de segurança de aplicações WEB e API - Firewall de Aplicação (WAF) com 60 meses de atualização de firmware, atualização automática de bases de dados, suporte e garantia do fabricante. FABRICANTE: FORTINET MODELO: FNC-CA-VM Atendendo todos os itens do termo de referência	<b>D1</b>	Assinatura	R\$ 3.500,00	R\$ 3.500,00	R\$ 42.000,00

Proposta e Anexos - Teltec Solutions Ltda. Doc. 114754/23. Data: 21/12/2023 20:12. Responsável: Jose E. A. de Alexeira. Impresso por fbarbosa2 em 07/02/2024 10:27. Validação: 269A.BE02.B529.8380.FC18.ED81.647C.88CD.

A validade da presente proposta é de 60 (sessenta) dias corridos, contados da sua abertura, observado o disposto no caput e parágrafo único do art. 110 da Lei no 8.666/93.

Os preços ofertados já incluem a entrega e retirada dos itens no local determinado.

Informamos, por oportuno, que no preço estão incluídos todos os custos diretos e indiretos para o perfeito fornecimento do objeto, inclusive os encargos da legislação social, trabalhista, previdenciária, englobando tudo o que for necessário para a execução total e completa do objeto licitado, conforme especificações constantes no Edital e seus Anexos.

Os dados da nossa empresa são:

EMPRESA: TELTEC SOLUTIONS	CNPJ: 04.892.991/00	01-15
LTDA		
INSCRIÇÃO ESTADUAL: 254.353.290	INSCRIÇÃO MUNICI	PAL: 417.510-7
OPTANTE PELO SIMPLES : NÃO		
ENDEREÇO: RUA MIGUEL DAUX, 100 -	- COQUEIROS - FLORIA	ANÓPOLIS/SC
FONE/FAX: (48) 3031-3450 / (65) 98126-	-6811	
E-MAIL: tens cites because and second of /	SITE: Altagreetees out?	and makes the property of the second
D	ADOS BANCARIOS	
BANCO: BRASIL	AGÈNCIA: 3077-5	CONTA: 7555-8

# **[04 892 991/0001-15]**

**TELTEC SOLUTIONS LTDA** 

Rua: Miguel Daux, 100

COQUEIROS - CEP 88080-220 FLORIANÓPOLIS - SC

Declaramos, para todos os fins, que o fornecimento do objeto se dará de acordo com as especificações definidas nesta proposta e respeitando o estabelecido no Edital e seus Anexos.

João Pessoa, 12 de dezembro de 2023.

Lucas Silvino da Silva

RG 2509339 SSP/PB CPF 051.748.624-52

X

## FEIRTINET.

# FortiGate FortiWiFi 60F Series

FG-60F, FG-61F, FWF-60F, and FWF-61F



FortiGate 60F





C.P.V

## **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 Al /
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 60F 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 60F 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 60F automatically controls, verifies, and facilitates user access to applications, delivering consistency with a seamless and optimized user experience.

IPS	NGFW	Threat Protection	Interfaces
1.4 Gbps	1 Gbps	700 Mbps	Multiple GE RJ45   Variants with internal storage   WiFi variants





Available in



**Appliance** 



Virtual







## **FortiOS Everywhere**

## FortiOS, Fortinet's Advanced Operating System

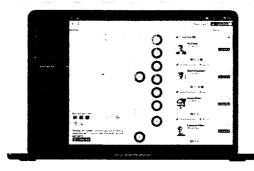
FortiOS enables the convergence of high performing networking and security across the Fortinet Security Fabric. Because it can be deployed anywhere, it delivers consistent and context-aware security posture across network, endpoint, and multi-cloud environments.

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.

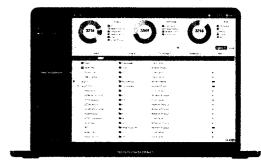
FortiOS dramatically expands the Fortinet Security Fabric's ability to deliver advanced Al/MLpowered services, inline advanced sandbox detection, integrated ZTNA enforcement, and more. It provides protection across hybrid deployment models for hardware, software, and Software-as-a-Service with SASE.

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 protektion with the latest FortiOS technology.



## **FortiGuard Services**

# BY SUT SPACE

## **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

Services address numerous security use cases across application usage as well as overall data security. This 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. Separately, our Inline Cloud Access Security Broker (CASB) service protects data in motion, at rest, and in the cloud. The service enforces major compliance standards and manages account, user and cloud application usage. Services also include capabilities designed to continually assess your infrastructure, validate that configurations are working effectively and secure, and generate awareness of risks and vulnerabilities that could impact business operations. This includes coverage across IoT devices for both IoT detection and IoT vulnerability correlation.

## **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**

# SPU

## 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 SOC4

- 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



## FortiCare Services

Fortinet is dedicated to helping our customers succeed, and every year FortiCare Services help thousands of organizations get the most from our Fortinet Security Fabric solution. Our lifecycle portfolio offers Design, Deploy, Operate, Optimize, and Evolve services. Operate services offer device-level FortiCare Elite service with enhanced SLAs to meet our customer's operational and availability needs. In addition, our customized account-level services provide rapid incident resolution and offer proactive care to maximize the security and performance of Fortinet deployments.





4 A do Olivoiro

Proposta e Anexos - Teltec Solutions Ltda. Doc. 114754/23. Data: 21/12/2023 20:12. Responsável: Jose E. A. de Oliveir Impresso por fbarbosa2 em 07/02/2024 10:27. Validação: 269A.BE02.B529.8380.FC18.ED81.647C.88CD.



## **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



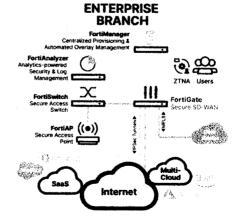
## Secure SD-WAN

- FortiGate WAN Edge powered by one OS and unified security and management framework and systems transforms and secures WANs
- Delivers superior quality of experience and effective security posture for work-from-any where models, SD-Branch, and cloud-first WAN use cases
- Achieve operational efficiencies at any scale through automation, deep analytics, and self-healing



## 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

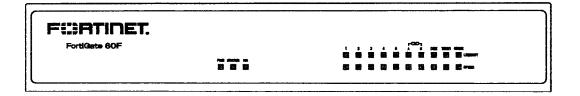


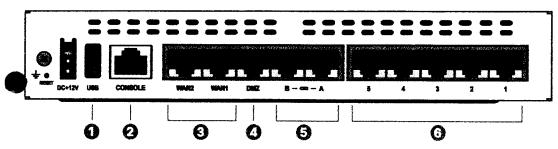


J. J.

## **Hardware**

## FortiGate FortiWiFi 60F/61F





## interfaces

- 1. 1 x USB Port
- 2. 1 x Console Port
- 3. 2 x GE RJ45 WAN Ports
- 4. 1 x GE RJ45 DMZ Port
- 5. 2 x GE RJ45 FortiLink Ports
- 6. 5 x GE RJ45 Internal Ports

## **Hardware Features**



## **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.

## **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.



2"}

A A TO

<b>a</b> 71810		eties 50F Series	거 ets인itro귀	
P <del>rop</del> osta e Anexos -	Teltec Solutions Ltda. Doc. 1147	754/23. Data: 21/12/2023 2	:0:12. Responsável: Jose E. A	۱. de Oliveir
· Impresso por	fbarbosa2 em 07/02/2024 10:27	<ol><li>7. Validação: 269A.BE02.B5</li></ol>	529.8380.FC18.ED81.647C.8	BCD.

	22 000	i		SSL Inspection Concurrent Session (IPS, avg. HTTPS) a
	007			SSL Inspection CPS (IPS, avg. HTTPS) *
	sdqW 0	E9		SSL Inspection Throughput (IPS, avg. HTTPS) 1
	500			Concurrent SSL-VPN Users (Recommended Maximum, Turnel Mode)
	sdqW 00	<b>)</b> 6		Judriguanit MAV-JSS
	009			Client-to-Gateway Prec VPM Tunnels
	500			Cateway-to-Cateway Prac VPM Turnels
	2 Gpba	9		Pasec VPM Throughput (512 byte)
	2000			Prewait Policies
	92 000	:		New Sessions/Second (TCP)
••	000 00	L		Concurrent Sessions (TCP)
	eddM (	<b>S</b>		Firewall Throughput (Packats Per Second)
	au 6.6			Hewell Latency (64 byte UDP packets)
	9/00 Gbps	/ot		Frameil Throughput (1518 / St2 ) as byte UDP peckets)
				System Performance
	sddM O	04		Threst Protection Throughput 2.5
	Cpbe			MGFW Throughput 2.4
	4 Gbps	1		* TuddguonfT 29
				System Performance Enterprise That I with
1 × 158 CB 22D		1 × 158 GB 22D		egenotic lermetrif
, d22 g2 g2 x t	-	G22 80 801 v 1		Console (RJ45)
	•		i i	USB Ports
802.11 a/b/g/n/ac-W2 t	802.11 a/b/g/n/ac-w2	•		
Single Radio (2.4GHz/5GHz),	Single Radio (2.4GHz/5GHz),	-	-	Wireless Interface
7	7	2	2	GE RJAS Fortillink Ports (Default)
S	S	S	S	GE R.145 Internal Ports
1/2	1/2	1/2	1/2	GE BJAS WAN / DMZ Ports
				Hardware Specifications
FORTIWIFI 61F	FORTIWIFI 60F	FORTIGATE 61F	FORTIGATE 60F	
780				Specifications
100				,

Malware Protection enabled.

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

Desktop

2.23 lbs (1.01 kg)

38.5 × 216 × 160 mm

12 × 8.5 × 6.3

Active-Active, Active-Passive, Clustering

200

26/19

74

01/01

8 Gpba

1.8 Gbps

3'2 98! @ 2 CH5' 2 98! @ 5"4 CH5

1300 Mpbs @ 2 CHS' 420 Mpbs @ 5.4 CHS

2×3

cipher suites.

CHES EUGETUY nework XT mumixelM

Form Factor

Dimensions

34gieW

speeds H-IM munical

OMIM (UM) need elqtriuM Radio Specifications

(mm) rigne J x ribiW x tripieH

Height x Width x Length (inches)

High Availability Configurations

Maximum Mumber of FortiToleans

(mumbraM \ thusted) anismod isutriV

CAPWAP Throughput (HTTP 6410)

Maximum Number of FordAPs (Total / Tunnel Mode)

Maximum Number of FordSwitches Supported

Application Control Throughput (HTTP 6410) 2

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

1 IPsec VPN performance test uses AES256-SHA256.

PPS (Enterprise Mix), Application Control, MCFW and Threst Protection are measured

with Logging enabled.

161 ·



# **Specifications**

	FORTIGATE 60F	FORTIGATE 61F	FORTIWIFI 60F	FORTIWIFI 61
Operating Environment and Certifications				
Power Rating		12Vc	Ic, 3A	
Power Required		Powered by External DC Power	Adapter, 100-240V AC, 50/60 Hz	
Meximum Current		100Vac/1.0A,	240Vac/0.6A	
Power Consumption (Average / Meximum)	10.17 W / 12.43 W	17.2 W / 18.7 W	17.2 W / 18.7 W	17.5 W / 19.0 W
Heat Dissipation	42.4 BTU/hr	42.4 BTU/hr	63.8 BTU/hr	64.8 BTU/hr
Operating Temperature		32°-104°F	(0°-40°C)	
Storage Temperature		-31°-158°F	(-35°-70°C)	
Humidity		Humidity 10%-90	% non-condensing	
Noise Level		Fanles	O dBA	
Operating Altitude		Up to 7400	ft (2250 m)	
Compliance		FCC, ICES, CE, RCM, V	CCI, BSMI, UL/cUL, CB	
Certifications		USGv	6/IPv6	









## **Subscriptions**

			100		
		A-la-certe	Enterprise Protection	Unified Threat Protection	Advanced Threat Protection
Service Category	Service Offering		Protection	Protection	Piotection
FortiGuard Security Services	IPS Service	•		•	•
	Anti-Mahware Protection (AMP) — Antivirus, Mobile Mahware, Botnet, CDR, Virus Outbreek Protection and FortiSandbox Cloud Service	•	•	•	•
	URL, DNS & Video Filtering Service	•	•	•	
	Anti-Spam		•	•	
	Al-besed inline Melwere Prevention Service	•	•		
	Data Loss Prevention Service 1	•	•		
	OT Security Service (OT Detection, OT Vulnerability correlation, Virtual Patching, OT Signature / Protocol Decoders) 1	•			
	Application Control		included with For	tiCare Subscription	
	CASS SeeS Control		included with For	tiCare Subscription	
SD-WAN and SASE Services	SD-WAN Underlay Bandwidth and Quality Monitoring Service	•			
	SD-WAN Overlay-as-a-Service for SasS-based overlay network provisioning	•			
	SD-WAN Connector for FortiSASE Secure Private Access	•			
	FortiSASE subscription including cloud management and 10Mbps bendwidth license <sup>2</sup>	•			
NOC and SOC Services	FortiGuard Attack Surface Security Service (IoT Detection, IoT Vulnerability Correlation, and Security Rating Updates) 1	•	•		
	FortiConverter Service	•	•		
	Managed FortiGate Service	•			
	FortiGate Cloud (SMB Logging + Cloud Management)	•			
	FortiAnniyzer Cloud	•			
	FortiAnalyzer Cloud with SOCaeS	•			
	FortiQuend SOCesS	•			
Hardware and	FortiCere Essentials	•			
Software Support	FortiCare Premium	•	•	•	•
	FortiCare Eilte	•			
Base Services	Internet Service (SacS) DB Updates				
	Geoff DB Updates		t==bdd64 =		
	Device/OS Detection Signatures		included with For	tiCare Subscription	
	Trusted Certificate DB Updates				
	DDNS (v4/v6) Service				

1. Full features available when running FortiOS 7.4.1 2. Desktop Models only



## **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 Elite

FortiCare Elite offers enhanced SLAs and quick issue resolution through a dedicated support team. It provides single-touch ticket handling, extended Extended End-of-Engineering-Support for 18 months, and access to the new FortiCare Elite Portal for a unified view of device and security health.



Proposta e Anexos - Teltec Solutions Ltda. Doc. 114754/23. Data: 21/12/2023 20:12. Responsável: Jose E. A. de Oliveira Impresso por fbarbosa2 em 07/02/2024 10:27. Validação: 269A.BE02.B529.8380.FC18.ED81.647C.88CD.



SKU Description Product 10x GE RJ45 ports (including 7x Internal ports, 2x WAN ports, 1x DMZ port) FG-60F FortiGate 60F 10x GE RJ45 ports (including 7x Internal ports, 2x WAN ports, 1x DMZ port), 128 GB SSD onboard storage FG-61F FortiGate 61F 10x GE RJ45 ports (including 7x Internal Ports, 2x WAN Ports, 1x DMZ Port), Wireless (802.11 a/b/g/n/ac-W2) FortiWiFI 60F FWF-60F-[RC] 10x GE RJ45 ports (including 7x Internal Ports, 2x WAN Ports, 1x DMZ Port), Wireless (802.11 a/b/g/n/ac-W2), 128GB SSD onboard storage FortiWIFI 61F FWF-61F-[RC] Optional Accessories Rack mount tray for all FortiGate E series and F series desktop models are backwards compatible with SP-RackTray-01. For list of compatible Rack Mount Tray SP-RACKTRAY-02 FortiGate products, visit our Documentation website, docs.fortinet.com Pack of 5 AC power adaptors for FG/FWF 60E/61E, 60F/61F, and 80E/81E AC Power Adaptor SP-FG60E-PDC-5 Pack of 20 wall mount kits for FG/FWF-80F and FG/FWF-80F series SP-FG60F-MOUNT-20 **Well Mount Kit** 

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

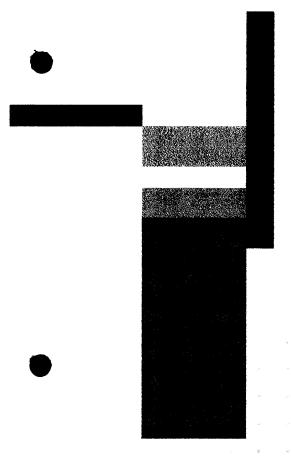


J. J.



## **Fortinet CSR 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.



www.fortinet.com

FWRTINET.

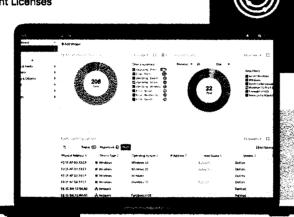
Copyright © 2023 Forthert, Inc., All rights reserved. Forthert, FortiGete\*, FortiCete\* and FortiCete\*, and certain other product or company names may be tradements of their respective owners. Performance and other metrics continued to their respective owners. Performance and other metrics continued to their respective owners. Performance and other metrics continued to their metrics of their respective owners. Performance are stated herein were settined in internal leb tests under foed other conditions, and actual performance and other metrics may brindly described their settines are stated to their settines of their respective owners. Performance are stated to their settines are stated to their settines

October 17, 2023

FGFWF-60F-DAT-R37-20231017

Proposta e Anexos - Teltec Solutions Ltda. Doc. 114754/23. Data: 21/12/2023 20:12. Responsável: Jose E. A. de Oliveira Impresso por fbarbosa2 em 07/02/2024 10:27. Validação: 269A.BE02.B529.8380.FC18.ED81.647C.88CD.

FortiNAC F Series Hardware, VM, and Endpoint Licenses





## **Highlights**

- Implement dynamic network scanning to classify and analyze device behaviors using continuous, automated techniques
- Maintain an updated inventory of all network devices, including BYOD, ioT. OT, and ioMT
- Continuously assess risks for every endpoint using real-time threat intelligence and behavioral patterns
- Adopt Zero Trust architecture for better device security and simplified management
- Integrate with various third-party network tools ensuring compatibility
- Relay real-time contextual data to SIEM, improving incident response. Ensure always-on identity checks and follow least privilege access, reinforcing the Zero Trust approach

# Visibility, Zero Trust Access and Incident Response for Connected Assets and Users

FortiNAC\* continues to be a cutting-edge network access control solution, enabling organizations to enforce network access policies and assure adherence to security protocols in light of increasingly sophisticated threats. It provides a comprehensive snapshot of all devices and users on the network, facilitating granular control of access based on user roles, device types, network locations, and now the behavioral patterns of devices and users.

The solution's capability now extends beyond automated onboarding of new endpoints; it incorporates real-time threat Intelligence and continuous risk assessment of devices, leveraging machine learning and AI technologies from FortiGuard Services. Given the rising prominence of BYOD (Bring Your Own Device) and IoT (Internet of Things), FortiNAC's continuous monitoring and immediate remediation of non-compliant devices have become even more crucial.

Moreover, FortiNAC's integration goes beyond third-party security solutions; it integrates with a wide range of cloud-based platforms and DevOps tools to ensure seamless and secure network operations in hybrid IT environments. FortiNAC leverages its integration with FortiAnalyzer to gain deep insight into network security posture, encompassing real-time visibility, predictive analytics, and more robust compliance reporting. With FortiNAC, organizations can more effectively secure their network against unauthorized access, potential threats, and increasingly, the insider threats, aligning with the emerging Zero Trust security model that emphasizes "never trust, always verify".

## Features

## Available in

\*\*\*\*\*

Appliance

Virtual

## Granular Visibility Across the Network for Every Device and User

FortiNAC leverages AI and machine learning from FortiGuard Security Services to provide detailed profilling of devices, including headless devices and ioT assets on your network. This profilling incorporates multiple information sources, behavior patterns, and real-time threat intelligence to accurately identify and assess what is on your network.

## Seamless integration and Control Across Diverse Environments

With the power of micro-segmentation and Zero Trust policies, FortiNAC allows for configuration changes on switches and wireless products from an extended range of vendors. It amplifies the reach of the Security Fabric across multi-cloud, hybrid IT, and heterogeneous environments, implementing "never trust, always verify" principles.

## **Automated Responsiveness**

FortiNAC reacts to network events in real-time to contain threats before they spread, utilizing a broad and customizable set of automation policies. Leveraging Ai, these policies can instantly trigger configuration changes and remediation actions when targeted behavior or anomalies are observed, aligning with the Zero Trust model's dynamic and proactive approach.

## **New FortiNAC-F**

FortiNAC introduces the new FortiNAC-F OS with hardened virtual and physical appliances that increase security and compliance capabilities. Following the tradition of providing the reliable platforms of Fortinet, the new FortiNAC-F will extend the performance capability and introduce new features.

## Highlights

## **Granular Device Visibility**

The essence of securing a dynamic, ever-evolving network lies in comprehending Its makeup. FortiNAC leverages Al and machine learning from FortiGuard Security Services, goes beyond merely "seeing" everything on the network—it comprehends and analyzes. It scans your network to discover every user, application, and device. Using a variety of techniques—it profiles each element based on observed behavior, real-time threat intelligence, as well as tapping into FortiGuard's IoT Services, a cloud-based database for identification lookups.

Scanning can be active or passive, utilizing permanent agents, dissolvable agents, or agentless approaches. Moreover, FortiNAC can evaluate a device against pre-approved profiles, noting any discrepancies or software updates required to patch vulnerabilities. With FortiNAC, the network isn't just known—it's understood, assessed, and continually monitored.

Besides recognizing the entire network, FortiNAC's advanced visibility incorporates passive traffic analysis, leveraging Fortinet FortiGate appliances as sensors to identify anomalous behavior patterns. These patterns can indicate a potential compromise, triggering real time alerts for the SOC team and aligning with the proactive threat containment



FortiNAC 21 Profilling Methods for Device Classification



PR

Proposta e Anexos - Teltec Solutions Ltda. Doc. 114754/23. Data: 21/12/2023 20:12. Responsável: Jose E. A. de Oliveira. Impresso por fbarbosa2 em 07/02/2024 10:27. Validação: 269A.BE02.B529.8380.FC18.ED81.647C.88CD.

## **Highlights**



## **Network Security and Intelligent Segmentation**

After successful classification of devices and user identification, FortiNAC now integrates advanced segmentation techniques to ensure only authorized users and devices have access to requisite resources, thus preventing unauthorized intrusion. Through its progressive role-based network access control, FortiNAC allows for strategic network segmentation by logically grouping similar data and applications, limiting access to a particular set of users or devices. This strategy effectively confines a compromised device, thereby inhibiting its ability to traverse the network and inflict damage on other resources. FortiNAC not only fortifies the protection of sensitive data and vital assets but also ensures adherence to internal, industrial, and government regulations and mandates.



## **Device integrity Verification and Malware Prevention**

FortiNAC emphasizes on the importance of device integrity prior to network connection, significantly reducing the risk and potential spread of malicious software. As a device attempts to join the network, FortiNAC assesses its configuration for compliance. Any non-compliant configuration is promptly managed; for instance, the device may be allocated to an isolated or restricted access VLAN, devoid of any access to corporate resources. This feature has become increasingly relevant with the rise of IoT devices and remote work trends, ensuring a secure and controlled network environment.



## Intelligent Monitoring and Automated Reaction

FortiNAC proactively supervises the network continuously, examining endpoints to verify their compliance with predefined profiles. Leveraging modern security tactics, FortiNAC rescreens devices to prevent any possible bypassing of network access security via MAC-address spoofing. Further, FortiNAC is equipped to identify irregularities in traffic patterns, a vital feature considering the growing complexities in network usage patterns with the rise of cloud and edge computing. This passive anomaly detection function operates symbiotically with FortiGate appliances. Upon recognizing a compromised or susceptible endpoint as a potential risk, FortiNAC promptly instigates an automated reaction, quarantining the endpoint in real-time, furthering its commitment to maintaining a secure and controlled network environment.



## FortiGate Sessions View

The FortiGate Sessions view adds the ability to accept netflow data from third party devices. Flows from other devices would also show up in this view.

eg a v									8
emstarė									
4 Westerman	Parada 4	Specie C	Protects i	American L	SOUTHFRE ANTHON	Wagagilleri B	Deplement Albert 2	Opening to Part F	Almeira C
daja politicarci .	\$9\$ (No.17	J***cul	1997	16,300 (17)	Ministration (Control	593	4434		and the great
Coupeling Contractor Another Region	197 1414.1	Firest	116	sectore in	000018437433	NA.2	29 147 24.14	443	30/02/2015/1902
Aristica Maciasio Bratica de Carlos de Carlos	16131-01	3 396	tre .	54083	90.50 NeW Seath	parties.	814/5/1007	A41	240 Carty Ass
our Accison	192.100 L)	Francis	24	to parte in	AUG 16 81 28 11	686	,03891714	443	4840 or 9510 to \$4
riests.	003451	(cesses	2.9	10/7/36/25	W-565-45-79-51	parent.	21469414	144	802 - 841, 0 to
NORSHIT	193 (60.11	Printer	ultra	66 45 38 16	565626 <b>4</b> 0104 to	44.756	2852	55	252-9039-1257-P
Appringence	172.076.23	riversal .	~4	0.000.000	NAMES OF COLUMN 2 IN COLUMN 2	1920	15.54	57	2012/2016 0/17:17
Englacer Flegeratives	197 102 ( 1	Array.	4.	10/00/08/10	aventant pre-	#451A	204 (4.04) 204	AJ;	200 (0.00 (0.00)
THE REAL PROPERTY.	Menter I.:	Trenc	a.	antitut is	20.33564915/411	4,045	1444	4.	2423 (FER 1232 FE
HALL WORKING BUILT	19239613	Jenne.	with	10 10 54 55	39564-811911	591	18.74		2.17.49.0314
and a processor	192 592 1 1	free/	wie	14101914	324230 #2 53 F1	2021	1544	4.5	4725 (5.26 % at 28
MATE NING	357 SALU	#Etra#	**	16.25 14 15	obstrant cour	9850	2162	F8	(921 57) 26 (1, 27 -1
tioning transferred the to	192 566 1.1	See all	est.	15303614	00.508684-04131	879.6	344.	141	gaugett jadgiban
cat <del>Message</del>	2011/01/19	Francis	N4	5-50 P.O.	brokelednow st	nest 4	642 (Sec 1921)	215	2005 (210+12/24)
Network	[12] [Au 1 ]	faguer	144	Such Self-	Bourboak Dada	وهم	16.05196.05	40;	August of adaptive
Name of Pages 1	357 154 1.3	France C	0.0	\$400.000	OFFICE STORY	4-724	14,43146.5	44)	publishes to the said
Neut Elem	192,1981,14	Remov	.00	26 0235-03	205045812911	55442	140,450,000,00	44)	9809/2009/31
i in allem	1423041.4	DOMANT:	And .	(0.69.0) 11	90,566,61,06.13	setti	160,295,259,976	40,1	, \$000,00094.0p.5149
	(91 t/85 # 1	treet	APP .	sivett.	X 570#44 54 17	*1768	places for 74	ACT.	20/07/09/12 14:
	192 tes 11	L. cap.	pile	440936.01	action ervisor	office.	550 - F1556 TA	445	50(2) \$4.69 Ctyp 41
	147,146.11	form.	ello.	2012-10-51	9/30/9/50/77	epide	146,6166,000	53*	4(95)-9-24 (47)-44
	262 149 13	Frenz:		10/20 to 11	90-17 SARS (7x)	32574	6466	n	gogadina at tyrong
	192 144.13	President	to.	50 56 64 64	0050 \$840 64 (T	4182	262,053,000,00	tes	2021-07:28:14:02:44
	172.150.1.1	Setura:	45	20 24-24-45	white-wast fresh	625.7	049095149044	1415	2000000 (0 pr ve et
	170 164 1.1	Serven	**	10/26/2015	0/50945V5*1t	range .	569039810	343	2000 07/2019 41/44

FortiNAC 21 Profiling Methods for Device Classification

## Security Fabric Integrations

FortiNAC integrates with multiple Fortinet products such as FortiGate, FortiSIEM, FortiAnalyzer, FortiEDR, and FortiDeceptor. The Security Rules are triggered by syslog/snmp messages from the other Fortinet products as shown below.



FortiNAC Security Rules



## Integration

	-									
i tuerer Blissmirwit	•	# 1 T	1.7	question + 0	100					
Contractions	:	3664	- New Proce	ST AND HE S	Plan Lindones &	jamar i	marky have a	Sare Toys 2	contractly taxas if	و جرب د
Apple Seint Straffs		<b>L</b>	¥	26 SZ 5 SE	Selection for the Selection	CARLOSS CHARGES CO. C. CT.	effective sec.	Tr.	140.04	Taulie Whater
At a State of Eco		*		States a	Account to Many	AM HOME MARKET BY A	. West 2	d	i de	FORCE WARREN
Sprace Reducts				50 to 16 to	90100 Ba A495	464 (C92 - \$ \$ 4 yellow)	6740 g x 14	- 6	cute.	Cautoria
ing-drawn linguation		-	4	29.17 ce 86	20 F / 20 S / 44 PA	7474 GOAD BOY COME BOOK STOOLS	Orac i y	А	Decades	Carrelland
Sar Bragonic			-	2010/05/05	S - 49- 4-M	tions of the latter over the latter.	Sec. 1	11	Severa.	Suite Offered
igoti.				10 to in Fa	(5) (5) (8) (8) (6)	UNA TOOL WAS LIGHT TOOL SHIP ST	Otto e	4	a com	1.00
			-	85 16 44 4 4	3141205.204	52.56 (2054) 126.5 April 15. 7	275-4-14	41.0	Court	Academic
بالمرواة معلاهم		100		291021704	and the second	MARKET MARKET AND AND A	galance on	109	Same	Ace - Pitters
Enswiratingsyamits		-	-	501011419	00 (A)(00/A)(1	CPA DOS- GET USER DO LEGIC M	las m	11.4	G-185a	Charles
SI MENTE CONTRACTOR		<u>.</u>		60 to 114 (2)	36/16/16/85/42 (7)	CHA COR WITH VERY FOR ELL I	Service.	454	14.3	Qui Please
Once hat on her		h		MEN CARD	45.57 M 65 N 2 N	CHARGO SAFTONS CO. STATE	1966		131496	Service of
Market Section		-	i i	NS 31: 64:16	representative	MH cost participation of the	Mary e St.	16	20,000	Nancy Press
12/4/464				sciote c	service seeding	944 Nash (927) 2014 (5 17 )	49424.4	.4	. cate	An erinan
Nivergo (C) As and Pro-		-		16 10 190 25	(CECAMERC)	College Causes, Basic College arms (1991)	*****	10.	10.46	Local States
A reference			-	ship record	PORTMET (218)	MILE OF THE ARM THAT SERVICE	Section 25	44.4	Jones .	Security Street
A David Chara	Ţ,	i.	_	Supplier 19	00 none 21 1 2 61	CHANGE AND UNITED IN THE	575.W177	504	: hear	Consult Teach
h Herad		ba .	- i	te to MEDia	901 MANAGED AT	SIMA SIGNO YASK SISTA RANG SIGLAM	West in	10	Visto	Const Yalls on
<b>1</b>	,	-		50 th (6) 29	er interespend	nere term paint seek section in	Where of	14.5	e-1012	John W. Physine
E Strategy	,		-	Salt Messi	(a) m, 42,000 to	TMANOR POSTURE AS A STORY	100000	10.0	District.	CAR \$1,000
				16. Sec. 16. 16.	CONTRACTOR AND SA	designation common properties	Office 19.	(0)	180429	2 empreyay
		*	4	Grant de la	gestaggaart.	SAA ISSA DAS 410° L	A	5.0	Care of the Control o	Castifica
			*	88 Sert 2 File	gunt the second	CHARLESTON, WANTED HER P. P. LEWIS CO.	tes s	347	19991	Con White
		×		tice to hei	arring high sa	SHA SEED VEHICLE STOLEN	Set in	597	19/9/9	14000-1960
		le .		No sa car pila	STEWN BERT	GRAPHICAL MADE COMPLETE AND ALLER A	De :	127	(Might	ing , a signer
		he .	hr	-	Section 14 and	early from their months, control or	10.0		No. au	

FortiNAC Adapter View

Faurite  1 September 1  4 September 2  Australian 2  George & Controller  George & Controller		(=)		( Inc.		Se more	***			
Account Responds	8	(D) Sec. 11. 19	77							. Historian
Arabanich Reagns das Arabans	ENW Addenial	Deskin figur 5	appear is better a	MANN OF T	rac yes f	2000 F	dues do s	Secreta	Market &	figure formular
iba.	172490 09/07/24	A Symposis	Bartington		ALORD KINDNESS PRINT		-0"+00	(80,000		*
AGMAN A	\$1.x14.8731045	4	Tebrate at			97700 m	27 11 12	perso		×
Application :	00 of +6 \$5.84 (s.	3 may	2019 Mg Mg			Address.	20.27 ·	fortises t		w
Marie Sagra and	OPPLICATION OF AT	& Week	\$510,000		CONTRACTOR NAME	254115	973254	LANGER		×
Active Courses	accust, net	\$ 25 A	19900			Manager and	Secret 19	105,000		
Denny Freeting Austr	251 52 46 (25 34) 26	Antonia	Sergeums		65865 (ESSECTION	Service Co.	Brests	1898.4		*
Normalia Specially	Defendants (#	@ Server	26 (24)			$_{0}N\Phi \phi _{0}=\phi \phi$	001114	April Chapter		*
(Market)	Marie 2005 INC.	■ A RAME	25-44-05-02		permitting property	STREET, A	20 M (m	p. 64/24/4		Ni Ni
House, Horts resilteres	4250 2+180431	• Weeke	Warden III		DESCRIPTION DESCRIPTION OF THE	William to the	464.0.39	(100)		×
More Michigan .	more and depth	32.7	Webger			Sec. 10	100 mg/ys	Sydnesic		*
A WILLIAM	Market State (Market	A Seconda	April william		ALMERICAN SERVER	strain a	July 154	Sec. et 4		×
A many & Country	of the west of the	4 may	White to			yother inc.	05.67 SA	MyDdune		*
i terre	DOMESTICAL TO	1 m-	Windows				que en	1417 442		×
M orp	Windows CL Block	3 seven	G* gran			Section 10	2500	Contract.		,
• System	60 60 to 960 750	Acres	Partie No.		5574079828551379	Mark Co.	Service.	0.0004		*
	appendent for a	3 N. 1	Western			Merce 9	1675. 46	National Co.		*
	Outstate 65 Asian	d Street	Western Co.			white was	2011/06	6,845.12		
	Windows Court	d Sect.	Marian P			1551-0-15	47311	Sections.		¥
	Load State 19	Asses	Bridger S		Survey and a second	e4e		(mar) in a		×
	a6 30 26 36 65 75 76	\$ 50 cm	Moreour .			87654 R 16	2014 61	26/200.00		*

FortiNAC New Endpoint Fingerprints View

## Integration

Extensive integration with desktop security software, directories, network infrastructure, and third-party security systems provides unparalleled visibility and control across the network environment.

The FortINAC family integrates

- . More than 3000 devices with unique MIB OIDs
- · More than 2000 models including switches, access points, and network controllers
- More than 90 vendors in networking, security, and communication industries with the following vendor and models as examples\*.

Network infrastructure	Adtran, Aerohive, AlaxalA Networks, Alcatel-Lucent, Allied Telesis, Alteon, APC, Apple, APRESIA Systems, Avaya, Brocade/Foundry Networks/Ruckus, Cisco/Meraki, D-Link, Extreme/Enterasys/Slemens, H3C, HP/Colubris/3Com/Aruba, Intel, Juniper, NEC, Riverbed/Xirrus, and SonicWall
Security infrastructure	CheckPoint, Cisco/SourceFire, Cyphort, FireEye, Juniper/ Netscreen, Qualys, Sonicwall, Tenable

Authentication and RADIUS — Cisc
Directory Services LDAP — Googl

RADIUS — Cisco ACS, Free RADIUS, Microsoft IAS, LDAP — Google SSO, Microsoft Active Directory, OpenLDAP

Operating Systems
Endpoint Security

Applications

Android, Apple MAC OSX and iOS, Linux, Microsoft Windows

Authentium, Avast, AVG, Avira, Blink, Bullguard, CA, ClamAV, Dr. Web, Enigma, ESET, F-Prot, F-Secure, G Data, Intego, Javacool, Lavasoft, Lightspeed, McAfee, Microsoft, MicroWorld, Norman, Norton, Panda, PC Tools, Rising, Softwin, Sophos, Spyware Bot, Sunbelt, Symantec, Trend Micro, Vexira, Webroot SpySweeper, Zone Alarm

Mobile Device Management AirWatch, Google GSuite, MaaS360, Microsoft InTune, Mobile Iron, XenMobile, JAMF, Nozomi Networks

 FortiNAC can be integrated with other vendors and technologies in addition to those listed here. This list represents integrations that have been validated in both test lab and production network environments.







## **Deployment Options**

## Easy Deployment

FortiNAC is a flexible and scalable solution that spans from mid-size to very large enterprise deployments. There are three elements to the FortiNAC solution.

- · Application and Control (required)
- · Management (optional)
- · FortiAnalyzer for Reports (optional)

The Application provides the visibility, and the Control provides the configuration capabilities and automated responsiveness features. The Management portion enables the sharing of concurrent users across a multi-server deployment. FortiAnalyzer provides reports and analytics based on the Information gathered from the network through FortiNAC.

FortiNAC can be deployed in virtual machines (VMWare/Hyper-V/ AWS/ Azure/ KVM) or on hardware appliances. The Application and Control Servers can be deployed in a variety of sizes, depending on the number of ports they need to support. FortiNAC is ideal for support distributed architectures, including SD-Branch locations.

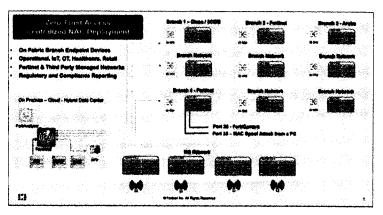
## **High Availability**

FortiNAC offers High Availability for disaster recovery to ensure redundancy. This state is achieved through active and passive instances where the passive (backup) becomes active when the main is no longer functioning normally. FortiNAC Manager can manage multiple high availability clusters distributed throughout the network as needed.

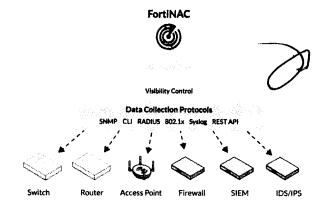
## **Deployment Options**

## Centralized Architecture

FortiNAC is an 'out of band' solution, meaning it does not sit in-line of user traffic. This architecture allows FortiNAC to be deployed centrally and manage many remote locations. Visibility, control, and response are achieved by integrating with, and leveraging the capabilities of, the network infrastructure. Control can be applied at the point of connection, at the very edge of the network while security device integrations allow FortiNAC to process security alerts and treat them as triggers for automated threat mitigation through customizable work flows.



Data collection is gathered from multiple sources using a variety of methods. SNMP, CLI, RADIUS, SYSLOG, API and DHCP fingerprints can all be used to achieve the detailed end-to-end visibility necessary to create a truly secure environment.







## Licensing

## FortiNAC Licensing

FortiNAC offers flexible deployment options based on the level of coverage and functionality desired.

## Base License

The BASE license level provides easy, one-step IoT security solution to close pressing endpoint security gaps by seeing all endpoint devices on the network, automating authorization, and enabling micro-segmentation and network lockdown. The BASE license level is appropriate for organizations that need to secure IoT and headless devices, and enable network lockdown with dynamic VLAN steering, but do not require more advanced user/network controls or automated threat response.

## Plus License

The PLUS license level builds on all the functionality of BASE with enhanced visibility and more advanced Network Access Controls and automated provisioning for users, guests, and devices as well as reporting and analytics. The reporting and analytics can greatly assist in providing audit documentation of compliance. The PLUS license level is appropriate for organizations that want complete endpoint visibility and a granuler control, but do not require automated threat response.

## Pro License

The PRO license level provides the ultimate in visibility, control and response. PRO license offers real-time endpoint visibility, comprehensive access control, and automated threat response and delivers contextual information with triaged alerts. The PRO license level is appropriate for organizations that want complete endpoint visibility, a flexible NAC solution with granular controls, as well as accurate event triage and real-time automated threat response.

## Licensing

		FORTINACLICENSE EXPES	BASE				
	Natwork	Network Discovery	0	0	 	0	_
		Rogue Identification	<ul><li>②</li></ul>	0			
		Device Profiting and Classification	Ø	0000000000000		0	
	Endpoint	Enhanced Visibility	00000	0		Ø	
/isibility		Anomaly Detection	0	Ø		Ø	
		MDM integration	⊘	0		Ø	
		Persistent Agent	⊘	0		Ø	
	User	Authentication		Ø		Ø	
		Captive Portal		Ø		Ø	
		Network Access Policies	0	0		Ø	
		loT Onboarding with Sponsor	⊘	Ø		Ō	
		Rogue Device Detection and Restriction	900	0		Ø	
		Firewall Segmentation	Ø	Õ		Õ	
Lutametian / (	D41	MAC Address Bypass (MAB)	. ⊘	Ō		Õ	
	Control	Full RADIUS (EAP)	0	0		0	
		BYOD / Onboarding		00		Õ	
		Guest Menagement		0		Ø	
		Endpoint Compliance		000		Õ	
		Web and Firewall Single Sign-on	Ø	Ö		Ö	
		Event Correlation	-	_		Õ	
		Extensible Actions and Audit Trail				Õ	
Incident Response		Alert Criticality and Routing				Ö	
		Guided Triage Workflows				Ö	
		Inbound Security Events				ĕ	
ntegrations		Outbound Security Events	. ⊙	0		<u>୭୦୭୦୭୦୭୦୭୦୭୭୭୭୭୭୭୭୭୭୭୭୭୭୭୭୭</u>	
		REST API	Ō	Ø		Õ	
laporting		Customizable Reports	Ö	Ö		_	









## Services



## **FortiCare Services**

As your business rapidly evolves, it is critical to advance your security capabilities as well. Often though, you do not have expertise within your organization to deploy, operate, and maintain these new capabilities or are up against tight deadlines to implement change. We understand this challenge and help thousands of organizations every year tackle this problem with FortiCare Services.

Our experts provide accelerated implementation of your technology, reliable assistance through advanced support, and proactive care to ensure your success with Fortinet investment. No matter the size or location of your organization, we are ready to provide you with an elevated experience to help you achieve your business goals with superior security and performance.

## FortiCare Support

A FortiCare Support contract entitles you not only to receive updates to the FortiNAC firmware, but also receive two important feeds.

- Network device database update FortiNAC supports more than 2500 switching, wireless,
  or firewall devices on the market. As new devices are released, FortiNAC's network device
  database should be updated to reflect these new models. The weekly update from the
  FortiNAC team will keep your deployment up to date.
- 2.FortiGuard IoT Service. One of the means that FortiNAC has to identify devices is to use the cloud-look up service hosted by FortiGuard Labs. A FortiCare Support contract entitles you to use that service at no additional cost, giving you access to a database of millions of devices.

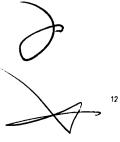
## **Specifications**

	FING MASSOF FING CAR	SPOR ENCHOARSON
System		
CPU	AMD EPYC 7413 24 Core, 2,65GHz 8899 Fi	req. intel Xeon E-2278GE 8 Core 3.3GHz Base Freq.
Memory	32GB DDR4 memory	16GB DDR4 memory
Hard Disk	2× 96008 SSDs	2× 9800B SSDs
BMC	N/A	N/A
Network Interface	1x GbE RJ45 and 4x 10GbE SFP+	4x GbE RJ45
RAID Card	N/A	N/A
RAID Configuration	Software	RAID1
Console Access	RJ45 type COM	port for CLI
Form Factor	1U Rack I	Mount
Dimensions		
Height x Width x Lungth (inchus)	1,73" x 17.20" x 24"	1.73" x 17.32" x 19.69"
Height x Width x Length (mm)	44 × 437 × 610	44 × 440 × 500
Weight	41 lbs (18.6 kg)	32 lbs (14.51 kg)
Environment		
Power Supply	Hot Plug, 1+1 Redundant PSU	Hot Plug, 1+1 Redundent PSU
Input Power	225 watt	174 Wett
Input Current	2.3A@100V, 0.94A@240V	1.5A@100V; 0.625A@240V
Cooling	5x system fans	4x system fans
Panel Display	N/A	N/A
Heat Dissipation	767.731867425 BTU/h	511.82124495 BTU/h
Operation Temperature Range	32*-104*F (0*-40*C)	32"-104"F (0"-40"C)
Storage Temperatura Range	-4°-158°F (-20°-70°C)	-4*-158°F (-20*-70°C)
Humidity (Operating) Humidity (Non-operating)	5% to 90% non-condensing	5% to 90% non-condensing
Certification		
Safety	Certified as applicable by Product Safety authorities Cenada (SCC), and Europe	
Electromagnetic (EMC) Certi	fied as applicable by EMC authorities worldwide, i European Un	including United States (FCC), Canada (ICES), and ion (CE).
Materials	entified as applicable by Materials authorities wo	1

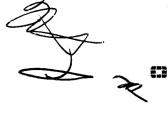
<sup>\*</sup> The console portican be used for access if the appliance has an issue i.e. you can connect a monitor and a keyboard to it. FortiNAC does not use the console port for access

China (ROHS).









vary based on individual environments. 3 The values in the VCPU column were deformined by using the CPUs in the CPU retained only as a guidelines only. Wit resources may capacity based on total ports count, not total number of devices. Porta in the network = total number of switch ports + maximum number of concurrent wireless connections, FortilAAC sizes the appliance

001	35	₽č	AMD Milen FPYC 7413 2.65 GHz 240/48T	e6Je7	AC 65 ot qU Servera	ENC-MX-AM	
100	96	7.5	TAND MINN EPYC 7543P 2.8 GH2 32C/64T	rsude	000 SZ 01 dU		FORMING-OS
001	35	24	AMD Milen EPYC 7413 2.66 GHz 24C/48T	mulbahi	ODD 81 of qU	FUC-CAX-VM	
OOL	aı	5	Intel Xeon E-2276 GE 3.3 GHz 6C/167	pows	000 8 of qU		
N=10 (BD)	(SS)	₫/h ACEN	CPU Reference	Target Snemnoven3	Ports in the Network	C) (C)	SO MA
			инсумуст	AllSE			

## VM Server Resource Sizing

cabacity based on total port counts not total number of devices. 3 Ports in the network a total number of awtich ports 4 maximum number of concurrent whelesa connections, PorthMAC stars the appliance

	3944	987H	
Cepacity	Instructives laguel	edAL	Hardware Server
enth ni stroq 0008 of qui seganalid Anowfen	#Jaemhonvid Hem2	Standakone Applitance (integrated Control Server and Application Server)	ter BNAC-CA-500F
Menages up to 15 000 ports in the natwork	Medium Environments	High Performence Control and Application Server	ForthAC-CA-600F
Manages up to 26 000 ports in the metwork	Large Environments with few Peralsient Agents	Ukra High Performance Confrol and Application Server	FORTHAC-CA-700F
Can manage up to 50 CA servers with letendes up to 600ms in lat environment	mrijibje sbbjjevcez Writi-site envicolments with	Managament Applience (Provides centralised managament when multiple septiences are deployed)	Forthac-M-550F

Hardware Server Sizing

Lite console bort can be raied for access if the appliance has an issue her bon can connect a monitor and a leayboard to it, bortifined does European Union (ROHS) and Chins (ROHS). Certified as applicable by Materials authorities worldwide, including SISTEMBER 1 United States (FCC), Canada (ICES), and European Union (CE). Ejectrowesbrage (EWC) Certified as applicable by EMC authorities worldwide, including European Union (CE). worldwide, including United States (NRTL), Canada (SCC), and Certified as applicable by Product Safety authorities Safety Certification S& to 80% non-condensing 4--128ok (-50--50-C) agnafi eruteraqme? agardič 35-104et (0-40-C) A\UT8 8\ESITE88.8\S! eus meases xe JUNEAU CHARLE YOMSOMATIC YOUR BASKE 1)RW 81E JBMOH INDU U29 Inabrubes (+) guin toH Adding semod (fix 9'8t) sql tp 010 × 127 × 010 173 × 1720 × 24 TO Reck Mount 107064 (0104 RI45 type COM port for CLI SOUPOIS ACCORD COLAR BIBWITOS RAID Configuration PARO GIVE Matwork in the face IX COE BINGS and 4x JOCOE 2kb+ V/N Herd Diek 50SS 95098 ×Z 9666 DDR4 memory ABILIOLA CbN AMD EPYC 7543P 32 Core, 2.8GHz Base Freq. **Wessky** 

Specifications

not have the console bott for accesa-

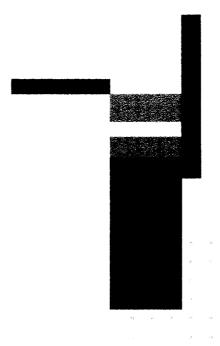
Virtual

Appliance

W.W.

## **Ordering Information**

PRODUCT	540	DISCHREGON
Appliances		
FortiNAC-CA-500F	FNC-CA-500F	FortiNAC Network Control and Application Server (F Series)
FortINAC-CA-800F	FNC-CA-600F	FortiNAC High Performance Network Control and Application Server (F Series)
For SNAC-CA-700F	FNC-CA-700F	FortiNAC Ultra High Performance Network Control and Application Server (F Series)
FortiNAC-M-550F	FNC-M-850F	FortiNAC Network Manager (F Series)
Virtual Machines		
FortiNAC Control and Application extended VM	FNC-CAX-VM	FortiNAC Control and Application extented VM Server (VMWare or Hyper-V or AWS or Azure or KVM) (Running FortiNAC-OS)
FortiNAC Menager extended VM	FNC-MX-VM	FortiNAC Manager extended VM Server (VM ware or Hyper-V or AWS or Azurs or KVM) (Running FortiNAC-OS)
Perpetual Licenses		
FortiNAC BASE License 100	LIC-FNAC-BASE-100	FortiNAC BASE License for 100 concurrent endpoint devices. The BASE Ilicense provides Endpoint Visibility and Dynamic VLAN Steering.
FortiNAC BASE License 1K	LIC-FNAC-BASE-1K	ForthNAC BASE Ucense for 1K concurrent endpoint devices. The BASE license provides Endpoint Visibility and Dynamic VLAN Steering.
For tiNAC BASE License 10K	LIC-FNAC-BASE-10K	FortiNAC BASE License for 10K concurrent endpoint devices. The BASE license provides Endpoint Visibility and Dynamic VLAN Steering.
FortiNAC BASE License 50K	LIC-FNAC-BASE-50K	FortiNAC BASE Ucense for 50K concurrent endpoint devices. The BASE license provides Endpoint Visibility and Dynamic VLAN Steering.
FortiNAC PLUS License 100	LIG-FNAC-PLUS-100	FortiNAC PLUS License for 100 concurrent endpoint devices. All the functionality of BASE with more advanced Network Access Controls and automated provisioning for users, guests, and devices.
FortiNAC PLUS License 1K	LIC-FNAC-PLUS-1K	FortiNAC PLUS License for 1K concurrent endpoint devices, All the functionality of 8ASE with more advanced Network Access Controls and automated provisioning for users, guests, and devices.
ForsiNAC PLUS License 10K	LIC-FNAC-PLUS-10K	FortiNAC PLUS License for 10K concurrent endpoint devices. All the functionality of BASE with more advanced Network Access Controls and automated provisioning for users, guests, and devices.
FortiNAC PLUS License 50K	LIC-FNAC-PLUS-SOK	FortiNAC PLUS License for 50K concurrent endpoint devices. All the functionality of BASE with more advanced Network Access Controls and sutomated provisioning for users, guests, and devices.
FortiNAC PRO License 100	LIC-FNAC-PRO-100	FortiNAC PRO License for 100 concurrent endpoint devices. PRO license level provides the ultimate in visibility, control and response.
FortiNAC PRO License 1K	LIC-FNAC-PRO-1K	FortiNAC PRO License for TK concurrent endpoint devices. PRO license level provides the ultimate in visibility, control and response.
FortiNAC PRO License 10K	LIC-FNAC-PRO-10K	FortiNAC PRO License for 10K concurrent endpoint devices. PRO license level provides the ultimate in visibility, control and response.
FortiNAC PRO License 50K	LIC-FNAC-PRO-50K	FortINAC PRO License for 50K concurrent endpoint devices. PRO license level provides the ultimate in visibility, control and response.
Subscription Licenses		
Visibility (BASE)	FC1-10-FNAC1-216-01-DD	License for 25 concurrent endpoints, MOQ 500.
	FC2-10-FNAC1-215-01-DD	License for 500 concurrent endpoints, MOQ 500.
	FC3-10-FNAC1-215-01-DD	License for 10K concurrent endpoints, MOQ 500,
Visibility and Control (PLUS)	FC1-10-FNAC1-213-01-DD	License for 25 concurrent andpoints. MOQ 500.
	FC2-10-FNAC1-213-01-DD	License for 500 concurrent endpoints. MOQ 500.
	FC3-10-FNAC1-213-01-DD	License for 10K concurrent endpoints, MOQ 500.
Visibility, Control, and Response (PRO)	FC2-10-FNAC1-209-01-DD	License for 25 concurrent endpoints, MOQ 500,
	FC3-10-FNAC1-209-01-DD	License for 500 concurrent endpoints, MOQ 500.
	FC4-10-FNAC1-209-01-DD	License for 10K concurrent endpoints, MOQ 500.





FERTINET.

www.fortinet.com

Copyright 8—1023 furniss, no. 3 figure seaword. Fortest," Fortister," Fortister," Fortister, of fortistated, and other mones are registered registered as fortisted, no. 9, ex distant furniss, no. 9, ex distant furniss, no. 9, ex distant furniss are registered as fortisted as fo

Detaber 12, 292;

40-DAT-R23-20251012

173

DATA SHEET

## FortiWeb™

zwajiable in











## Web Application and API Protection

FortiWeb 100E, 400E, 800E, 1000F, 2000F, 3000F, 4000F, VM, and Container

FortiWeb is a web application firewall (WAF) that protects web applications and APIs from attacks that target known and unknown exploits and helps maintain compliance with regulations.





Using machine learning to model each application, FortiWeb defends applications from known vulnerabilities and from zero-day threats. High performance physical, virtual appliances and containers deploy on-site or in the public cloud to serve any size of the organization from small businesses to service providers carriers, and large enterprises.

## **Web Application Protection**

Multi layer protection against the OWASP Top 10 application attacks including machine learning to defend against known and unknown attacks.



Protect your APIs from malicious actors by automatically enforcing positive and negative security policies. Seamlessly integrate API security into your CI/CD pipeline.



## **Bot Mitigation**

Protect websites, mobile applications, and APIs from automated attacks with advanced bot mitigation that accurately differentiates between good bot traffic and malicious bots. FortiWeb Bot Mitigation provides the visibility and control you need without slowing down your users with unnecessary captchas or challenges.

## Highlights

- Machine learning that detects and blocks threats while minimizing false positives
- Advanced Bot Mitigation effectively protect web assets without imposing friction on legitimate users
- Protection for APIs, including those used to support mobile applications
- · Enhanced protection with Fortinet Security Fabric integration
- Simplified attack investigation with Threat Analytics
- Third-party integration and virtual patching



FortiCare Worldwide 24/7 Support

support.fortinet.com

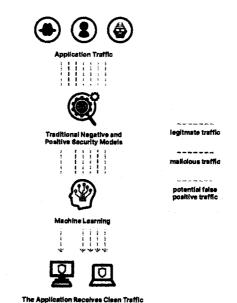


FortiGuard Security Services

www.fortiguard.com



## HIGHLIGHTS



FortiWeb goes beyond traditional negative and positive security models (attack signatures, iP address reputation, protocol validation, and so on), and applies a second layer of machine learning-based analytics to detact and block malicious anomalies white

## Machine Learning Improves Detection and **Drives Operational Efficiency**

FortiWeb's multi-layer approach provides two key benefits: superior threat detection and improved operational efficiency.

FortiWeb's ability to detect anomalous behavior relative to the specific application being protected enables the solution to block unknown, never-before-seen exploits, providing your best protection against zero-day attacks targeting your application.

Operationally, FortiWeb machine learning relieves you of time-consuming tasks such as remediating false positives or manually tuning WAF rules. FortiWeb continually updates the model as your application evolves, so there is no need to manually update rules every time you update your application. FortiWeb enables you to get your code into production faster, eliminating the need for time-consuming manual WAF rules tuning and troubleshooting the false positives that plague less advanced WAFs. Block Zero Day Threats

## Comprehensive Web Application Security

Using an advanced multi-layered and correlated approach, FortiWeb provides complete security for your web-based applications from the OWASP Top 10 and many other threats. FortiWeb's first layer of defense uses traditional WAF detection engines (e.g. attack signatures, IP address reputation, protocol validation, and more) to identify and block malicious traffic, powered by intelligence from Fortinet's industry leading security research from FortiGuard Labs. FortiWeb's machine learning detection engine then examines traffic that passes this first layer, using a continuously updated model of your application to identify malicious anomalies and block them as well.

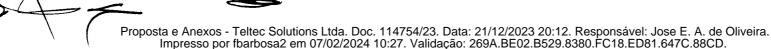
## API Discovery and Protection

Fueling the digital transformation APIs have become increasingly popular, providing the backbone for mobile applications, automated business to business operations and ease of management across applications. However, with their popularity they also increase the attack surface with additional exposed application surfaces that organizations must secure. Fortinet's FortiWeb web application firewall provides the right tools to address threats to APIs. FortiWeb API Discovery and Protection uses machine learning algorithms to automatically discover APIs by continuously evaluating application traffic. Discovery is an integral role for establishing a positive security model and FortiWeb protects your critical APIs based on your profiled API inventory. FortiWeb can also integrate out of the box policies together with an automatically generated positive security model policy that is based on your organization's schema specification (OpenAPI, XML and generic JSON are supported schemas) to protect against API exploits. FortiWeb schema validation can be integrated into the CI/CD pipeline, automatically generating an updated positive security model policy once the API is updated...

## **Bot Mitigation**

FortiWeb protects against automated bots, webs scrapers. crawlers, data harvesting, credential stuffing and other automated attacks to protect your web assets, mobile APIs, applications, users and sensitive data. Combining machine learning with policies such as threshold based detection, Bot deception and Biometrics based detection with superior good bot identification FortiWeb is able to block malicious bot attacks while reducing friction on legitimate users. With advanced tracking techniques FortiWeb can differentiate between humans, automated requests and repeat offenders, track behavior over time to better identify humans from bots and enforce CAPTCHA challenges when required. Together with FortiView, FortiWeb's graphical analysis dashboard organizations can purelly identify attacks and differentiate from good bots and legitimate (figre.

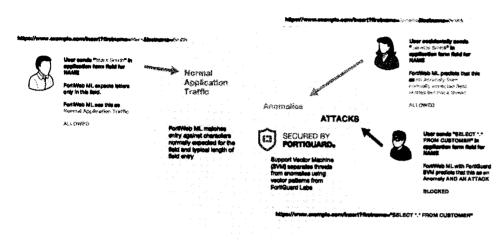






## **HIGHLIGHTS**

FortiWeb's machine learning accurately detects anomalies and identifies which are threats. Unlike prevailing auto-learning detection models used by other WAF vendors that treat every anomaly as a threat, FortiWeb's precision nearly eliminates false positive detections and catches attack types that others cannot.

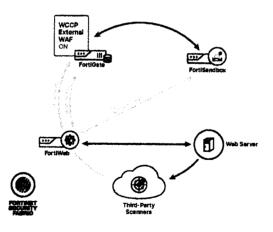


FortiWeb's Al-based machine learning evaluates application requests to determine if they are normal, benign anomalies, or anomalies that are threats.

## Deep Integration into the Fortinet Security Fabric and Third-Party Scanners

As the threat landscape evolves, many new threats require a multi-pronged approach for protecting web-based applications. Advanced Persistent Threats that target users can take many different forms than traditional singlevector attack types and can evade protections offered only by a single device. FortiWeb's integration with FortiGate and FortiSandbox extend basic WAF protections through synchronization and sharing of threat information to both deeply scan suspicious files and share infected internal sources.

FortiWeb also provides integration with leading third-party vulnerability scanners including Acunetix, HP WebInspect. IBM AppScan, Qualys, ImmuniWeb and WhiteHat to provide dynamic virtual patches to security issues in application environments. Vulnerabilities found by the scanner are quickly and automatically turned into security rules by FortiWeb to protect the application until developers can address them in the application code.



integration with other Fortinet Security Fabric elements, including FortiGate and FortiSendbox, delivers APT protection and extends vulnerability

## HIGHLIGHTS

## Solving the Challenge of False **Threat Detections**

False positive threat detections can be very disruptive and force many administrators to loosen security rules on their web application firewalls to the point where many often become a monitoring tool rather than a trusted threat avoidance platform. The installation of a WAF may take only minutes, however fine-tuning can take days, or even weeks. Even after setup, a WAF can require regular checkups and tweaks as applications and the environment change.

FortiWeb's Al-based machine learning addresses false positive and negative threat detections without the need to tediously manage whitelists and fine-tune threat detection policies. With near 100% accuracy, the dual layer machine learning engines detect anomalies and then determine if they are threats unlike other methods that block all anomalies. regardless of their intent. When combined with other tools, including user tracking, session tracking, and threat weighting, FortiWeb virtually eliminates all false detection scenarios.

## **Advanced Graphical Analysis and** Reporting

FortiWeb includes a suite of graphical analysis tools called FortiView. Similar to other Fortinet products such as FortiGate, FortiWeb gives administrators the ability to visualize and drill-down into key elements of FortiWeb such as server/IP configurations, attack and traffic logs, attack maps, OWASP Top 10 attack categorization, and user activity. FortiView for FortiWeb lets administrators quickly identify suspicious activity in real time and address critical use cases such as origin of threats, common violations, and client/ device risks.

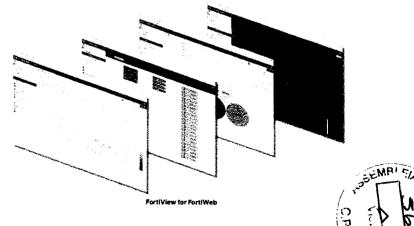
## Secured by FortiGuard

Fortinet's Award-winning FortiGuard Labs is the backbone for many of FortiWeb's layers in its approach to application security. Offered as five separate options, you can choose the FortiGuard services you need to protect your web applications. FortiWeb IP address reputation service protects you from known attack sources like botnets, spammers, anonymous proxies, and sources known to be infected with malicious software.

FortiWeb Security Service is designed just for FortiWeb including items such as application laver signatures, machine learning threat models, malicious robots, suspicious URL patterns, and web vulnerability scanner updates. Credential Stuffing Defense checks login attempts against FortiGuard's list of compromised credentials and can take actions ranging from alerts to blocking logins from suspected stolen user ids and passwords. The FortiWeb Cloud Sandbox subscription enables FortiWeb to integrate with Fortinet's cloud-sandbox service. Finally, FortiWeb offers FortiGuard's top-rated antivirus engine that scans all file uploads for threats that can infect your servers or other network elements.

## VM and Public Cloud Options

FortiWeb provides maximum flexibility in supporting your virtual and hybrid environments. The virtual versions of FortiWeb support all the same features as our hardwarebased devices and can be deployed in VMware. Microsoft Hyper-V, Citrix XenServer, Open Source Xen, VirtualBox, KVM, and Docker platforms. FortiWeb is also available for AWS, Azure, Google Cloud, and Oracle Cloud as a VM, and as WAF as a Service. For more information, see Fortiweb-Cloud.com.









£13

Proposta e Anexos - Teltec Solutions Ltda. Doc. 114754/23. Data: 21/12/2023 20:12. Responsável: Jose E. A. de Oliveira. Impresso por fbarbosa2 em 07/02/2024 10:27. Validação: 269A.BE02.B529.8380.FC18.ED81.647C.88CD.

## **FEATURES**

## **Deployment Options**

- Reverse Proxy
- Inline Transparent
- True Transparent Proxy
- Offline Sniffing
- WCCP

## **Web Security**

- Al-based Machine Learning
- Automatic profiling (white list)
- Web server and application signatures (black list)
- IP address reputation
- IP address geolocation
- HTTP RFC compliance
- Native support for HTTP/2
- WebSocket protection and signature enforcement
- Man in the Browser (MiTB) protection

## **Application Attack Protection**

- OWASP Top 10
- Cross Site Scripting
- SQL Injection
- Cross Site Request Forgery
- Session Hijacking
- Built-in Vulnerability Scanner
- Third-party scanner integration (virtual patching)
- File upload scanning with AV and sandbox

## Security Services

- Malware detection
- Virtual patching
- Protocol validation
- Brute force protection
- Cookie signing and encryption
- Threat scoring and weighting
- Syntax-based SQLi and XSS detection
- HTTP Header Security
- Custom error message and error code
- Operating system intrusion signatures
- Known threat and zero-day attack protection
- L4 Stateful Network Firewall
- DoS prevention
- Advanced correlation protection using multiple security elements Web Dericement Protection

## **Application Delivery**

- Layer 7 server load balancing
- URL Rewriting
- Content Routing
- HTTPS/SSL Offloading
- HTTP Compression
- Caching

### Authentication

- · Active and passive authentication
- Site Publishing and SSO
- RSA Access for 2-factor authentication
- LDAP, RADIUS, and SAML support
- SSL client certificate support
- CAPTCHA and Real Browser Enforcement (RBE)

### **API Protection**

- Machine Learning based API Discovery and Protection
- · XML and JSON protocol conformance
- CI/CD integration
- · Schema verification
- API Gateway
- Web services signatures

## **Bot Mitigation**

- Machine Learning based Bot Mitigation
- Biometrics Based Detection
- Threshold Based Detection
- Bot Deception
- Know Bots

## Management and Reporting

- · Web user Interface
- Command line interface
- · FortiView graphical analysis and reporting tools
- Central management for multiple FortiWeb devices
- Active/Active HA Clustering
- REST API
- Centralized logging and reporting
- User/device tracking
- Real-time dashboards
- Bot dashboard
- OWASP Top 10 attack categorization
- Geo IP Analytics
- SNMP, Syslog and Email Logging/ Monitoring
- Administrative Domains with full RBAC

## Other

- IPv6 Ready
- HTTP/2 to HTTP 1.1 translation
- HSM Integration
- Seamless PKI integration
- Attachment scanning for ActiveSync/MAPI applications, OWA, and FTP
- · High Availability with Config-sync for syncing across multiple active appliances
- Auto setup and default configuration settings for simplified deployment
- Setup Wizards for common applications and databases
- · Preconfigured for common Microsoft applications; Exchange, SharePoint,
- OpenStack support for FortiWeb
- · Predefined security policies for Drupal and Wordpress applications
- WebSockets support

## **SPECIFICATIONS**

	r-dypt		
	***	.01	
	FOR DWGR 100F	FORTIWEL 400E	FORTIWES GOVE
fardware value este cele un incomplication in	AND THE RESERVE OF THE PROPERTY OF THE PROPERT		
0/100/1000 interfaces (RJ-45 ports)	4	4 GE RJ45, 4 SFP GE	4 GE RJ45 (2 bypass), 4 SFP GE
OG BASS-BR SFP+ Ports	_	_	
ISL/TLS Processing	Softwere	Software	Hardware
JSB Interfaces	2	2	2
Roraga	32 GB \$SD	460 GB 55D	480 GB SSD
form Factor	Desktop	10	10
Frusted Platform Module (TPM)	No	No	No
Power Supply	Single	Single	Dual
System Performance			
Phroughput	50 Mbps	250 Mbps	750 Mbps
stency	<5ms	<5ms	<sms< td=""></sms<>
ligh Availability	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering
	, t <sub>a</sub> ; ; , , , , , , , , , , , , , , , , ,		Unlimited
Application Licenses	Unlimited	Unimited	CONTROL CONTRO
Application Licenses Administrative Domains	-	Unlimited 32	32
	-		
Administrative Domains I performance values are "up to" and vary dec Dimensions Height x Width x Langth (Inches)	pending on the system configuration.	32	32 
Administrative Domeins i performance values are "up to" and vary dec Dimensions	pending on the system configuration. 1.81 × 8.27 × 5.24	32 1.73 × 17.24 × 18.38	32 1.73 × 17.24 × 16.38
Administrativa Domains I performence values are "up to" and vary dec Simenalons Height x Width x Length (Inches) Height x Width x Length (Inches)	pending on the system configuration.  1.61 × 8.27 × 5.24  41 × 210 × 133	32 1,73 × 17.24 × 18.38 44 × 438 × 418	32 1,73 × 17,24 × 16,38 44 × 436 × 416
Administrativa Domains I performance values are "up to" and vary dec Dimensions Height x Width x Length (Inches) Height x Width x Length (nvn) Weight	cending on the system configuration.  1.81 × 8.27 × 5.24  41 × 210 × 133  2.3 lbs (1.1 kg)	32 1.73 × 17.24 × 18.38 44 × 438 × 418 22 ibs (8.87 kg)	32 173 × 17.24 × 16.38 44 × 438 × 416 22 lbs (6.97 kg)
Administrative Domeins I performence values are "up to" and vary dec Dimensions Height x Width x Length (Inches) Height x Width x Length (mm) Weight Rack Mountable	cending on the system configuration.  1.81 × 8.27 × 5.24  41 × 210 × 133  2.3 lbs (1.1 kg)	32 1.73 × 17.24 × 18.38 44 × 438 × 418 22 ibs (8.87 kg)	32 173 × 17.24 × 16.38 44 × 438 × 416 22 lbs (6.97 kg)
Administrative Domains I performance values are "up to" and vary des Simensions Leight x Width x Length (Inches) Height x Width x Length (mm) Weight Reck Mountable Environment	pending on the system configuration.  1.61 × 8.27 × 5.24  41 × 2.0 × 133  2.3 lbs (1.1 kg)  Optional	32 1.73 × 17.24 × 16.38 44 × 438 × 418 22 (bs (6.87 kg) Yes	32 1,73 × 17.24 × 16.38 44 × 438 × 416 22 lts (6.97 kg) Yes
Administrativa Domains I performanca vakuas are "up to" and vary dec Simenaions Height x Wridth x Length (Inches) Height x Wridth x Length (mm) Weight Rack Mountable Environment Power Required	sending on the system configuration.  1.81 × 8.27 × 5.24  41 × 210 × 133  2.3 fbs (1.1 kg)  Optional  100-240V AC, 50-80 Hz	32  1.73 × 17.24 × 16.38  44 × 438 × 416  22 (bs (6.87 kg))  Yes  100-240V AC, 50-40 Hz	32 1.73 × 17.24 × 16.38 44 × 438 × 416 22 lbs (9.97 kg) Yes 100-240V AC, 50-80 Hz
Administrativa Domains I performance values are "up to" and vary dec Dimensions Height x Width x Length (inches) Height x Width x Length (nvm) Weight Rack Mountable Environment Power Required Maximum Current	1.61 × 8.27 × 5.24 41 × 210 × 133 2.3 fbs (1.1 kg) Optional 100-240V AC, 50-60 Hz 110V/1.2A, 220V/1.2A	32  1.73 × 17.24 × 18.38  44 × 438 × 416  22 (bs (8.97 kg)  Yes  100-240V AC, 50-60 Hz  100V/SA, 240V/3A	32  1/3 × 17.24 × 16.36  44 × 436 × 416  22 lbs (6.97 kg)  Yes  100-240V AC, 50-60 Hz 100V/SA, 240V/SA
Administrative Domeins I performence values are "up to" and vary dec Dimensions Height x Width x Length (Inches) Height x Width x Length (nm) Weight Rock Mountable Enrirorment Mower Required Madmum Current Power Consumption (Average)	1.61 × 8.27 × 5.24  1.61 × 8.27 × 5.24  41 × 210 × 133  2.3 lbs (1.1 kg)  Optional  100-240V AC, 50-60 Hz  110V1.2A, 220V1.2A	32  1.73 × 17.24 × 18.38  44 × 438 × 418  22 (bs (6.97 kg)  Yes  100-240V AC, 50-60 Hz  100V/SA, 240V/SA	32  1.73 × 17.24 × 16.38  44 × 438 × 416  22 lbs (6.97 kg)  Yes  100-240V AC, 50-60 Hz  100 VSA, 240V/SA  109 W
Administrative Domains  I performence values are "up to" and vary dec  Dimensions  Height x Width x Langth (Inches)  Height x Width x Langth (nvm)  Weight  Reck Mountable  Environment  Power Required  Madmum Current  Power Consumption (Average)  Heat Dissipation	pending on the system configuration.  1.61 × 8.27 × 5.24  41 × 210 × 133  2.3 fbs (13 kg)  Optional  100-240V AC, 50-60 Hz  110V/12A, 220V/1.2A  18 W  74 BTU/h	32  1.73 × 17.24 × 16.38  44 × 438 × 416  22 lbs (6.97 kg)  Yes  100~240V AC, 50~60 Hz  100V/5A, 240V/3A  109 W  446.3 BTU(h	32  1.73 × 17.24 × 16.38  44 × 438 × 416  22 lbs (9.97 kg)  Yes  100-2 40V AC, 50-80 Hz 100 V/5A, 240V/3A 109 W 448.3 BTU/h
Administrative Domeins  I performance values are "up to" and vary dec  Simenalone  Height x Wridth x Length (Inches)  Height x Wridth x Length (mm)  Weight  Rack Mountable  Environment  Power Required  Madmun Current  Power Consumption (Average)  Hest Disablation  Operating Temperature  Storage Temperature	Dending on the system configuration.  1.81 × 8.27 × 5.24  41 × 210 × 133  2.3 fibs (1.1 kg)  Optional  100-240V AC, 50-60 Hz  110V/1.2A, 220V/1.2A  18 W  74 BTU/h  32*-104*F (0*-40*C)	32  1.73 × 17.24 × 16.38  44 × 438 × 418  22 (bs (6.87 kg))  Yes  100-240V AC, 50-60 Hz  100V/SA, 240V/3A  109 W  446.3 BTU/h  32*-(04** (0*-40*C)	32 173 × 17.24 × 16.38 44 × 438 × 416 22 lbs (6.97 kg) Yes 100-240V AC, 50-60 Hz 100V5A, 240V/3A 109 W 446.3 8TUh 32*-104*F (0*-40*C)
Administrative Domeins  I performence values are "up to" and vary dec  Simenalone  Height x Wridth x Length (Inches)  Height x Wridth x Length (mm)  Weight  Rack Mountable  Environment  Power Required  Madmun Current  Power Consumption (Average)  Hest Disablation  Operating Temperature  Brorage Temperature  Brorage Temperature  Forced Airflow	Dending on the system configuration.  1.81 × 8.27 × 5.24  41 × 210 × 133  2.3 fbs (1.1 kg)  Optional  100-240V AC, 50-80 Hz  110V/1.2A, 220V/1.2A  18 W  74 BTU/h  32*-104*F (0*-40*C)  -13*-158*F (-25*-70*C)	32  1.73 × 17.24 × 18.38  44 × 438 × 416  22 ibs (6.87 kg)  Yes  100-240V AC, 50-60 Hz  100V/SA, 240V/3A  109 W  446.3 BTu/h  32**-104**F (0**-40**C)  -13**-158**F (-25*-70**C)	32  1.73 × 17.24 × 16.38  44 × 438 × 416  22 lbs (9.97 kg)  Yes  100-240V AC, 50-80 Hz 1004/5A, 240V/3A  109 W  446 3 BTU/h 32*-104*F (0*-40*C)  -13*-158*F (-25*-70*C)
Administrativa Domains  I performanca values are "up to" and vary dec  Simenalons  Height x Width x Length (Inches)  Height x Width x Length (mm)  Weight  Tack Mountable  Environment  Hower Required  Madmum Current  Power Consumption (Average)  Hest Dissiption  Operating Temperature	Dending on the system configuration.  1.81 × 8.27 × 5.24  41 × 210 × 133  2.3 fbs (1.1 kg)  Optional  100-240V AC, 50-60 Hz  110V/1.2A, 220V/1.2A  18 W  74 BTU/h  32*-104*F (0*-40*C)  -13*-158*F (-25*-70*C)  NIA (familiess)	32  1.73 × 17.24 × 18.38  44 × 438 × 418  22 ibs (8.97 kg)  Yes  100-240V AC, 50-60 Hz  100V/SA, 240V/3A  109 W  446.3 BTU/h  32**-104**F (0**-40**C)  -13**-158**F (-25**-70**C)  Front to Back	32  173 × 17.24 × 16.38  44 × 438 × 416  22 lbs (9.97 kg)  Yes  100-240V AC, 50-80 Hz  100/5A, 240V/3A  109 W  448 3 BTU/h  32*-104*F (0*-40*C)  -13*-158*F (-25*-70*C)  Front to Back



# **SPECIFICATIONS**

DATA SHEET | FortiWeb\*\*

	for a course air sein s	Arry se balan de	after the enable to	NO 1 11 11 10 00000
	FORTWEIL HARE	LONDONES DOOM	EGRITWO SCROP	COLLEGE ADOUT
lurdware	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			<del> </del>
G/100/1000 interfaces (RJ45 parts)	8 bypass, 4x SFP GE (non-bypass)	4GE (4 bypass), 4 SFP GE	8GE (8 bypass)	8GE (6 bypass)
OG BASE-SR SFP+ Ports	2	4	10 (2 bypass)	10 (2 bypess)
10C CEFF	•	•	-	2 typess
SL/TL8 Processing	Hardware	Hardware	Hardware	Hardware
ISB Interfeces	2	2	2	2
llorage	2× 480 GB 890	2 × 480 GB SSD	2 × 980 GB SSD	2 × 960 GB 58D
orm Pector	20	2U	20	2U
rusted Platform Module (TPM)	No	Yes	Yes	Yes
tower Supply	Dual Hot Swappable	Dual Hot Swappable	Dual Hot Swappable	Dual Hot Sweppable
ystem Performance				
Throughput	2.5 Gtips	5 Gbps	10 Gbps	70 Obps
atency	<5ms	<5ma	<sma< td=""><td>&lt;5ms</td></sma<>	<5ms
ligh Availability	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering	Active/Passive, Active/Active Clustering
pplication Licenses	Unilmited	Unlimited	Unimited	Unlimited
dministrativa Domains	64	96	98	192
performance values are "up to" and vary dep	pending on the system configuration	п.		***************************************
limensions				
leight x Width x Langth (Inches)	3.46 × 16.93 × 19.73	2.5 × 17.2 × 20.8	3.5 × 17.5 × 22.6	3.5 × 17.5 × 22.6
leight x Width x Langth (mm)	88 × 430 × 501.20	88 × 438 × 630	88 × 444 × 574	88 × 444 × 574
Velght.	28 lbs (12.8 kg)	33 lbs (15 kg)	56.2 lbs (22.5 kg)	56.2 lbs (22.5 kg)
lack Mountable	Yes, with flanges	Yes	Yes	Yeş
avirorenent.				
ower Required	100-240V AC, 50-60 Hz	100-240V AC, 60-50 Hz	100-240V AC, 60-50 Hz	100~240V AC, 60~50 Hz
faximum Current	100V/5A, 240V/3A	120V/8A, 240V/3A	120V/2.8A, 240V/1.3A	120V/3A, 240V/1.5A
ower Consumption (Average)	140 W	200 W	200 W	248.5 W
		1433 BTU/h	1045.5 BTU/h	1219.8 BTU/h
leat Dissipation	471 BTU/h	1433 01 0/11		
***************************************	471 BTU/h 32°-104°F (0°-40°C)	32*-104*F (0*-40*C)	32°-104°F (0°-40°C)	32°-104°F (0°-40°C)
leat Dissipation		*******************	32°-104°F (0°-40°C) -4°-158°F (-20°-70°C)	32*-104*F (0*-40*C) -4*-158*F (-20*-70*C)
leat Dissipation operating Temperature	32°-104°F (0°-40°C)	32*-104*F (0*-40*C)	******************************	*************************************
rent Dissipation operating Temperature storage Temperature	32°-104°F (0°-40°C) -4°-198°F (-20°-70°C)	32°-104°F (0°-40°C) -4°-158°F (-20°-70°C)	-4*-158°F (-20*-70°C)	-4*-156*F (-20*-70*C)

FCC Class A Part 15, RCM, VCCI, CE, UL/CB/cUL

FCC Class A Part 15, RCM, VCCI, CE, UL/CB/cUL

VIRTUAL MACHINES	FORTIWEE VIV() VORU)	EONTHWER AW (5 ACENT	LOUGH MES AND 14 AUDIT	FORTIWER-VM (8-4CBO)	CHEMINER SINCE ACTION
System Performance			A AND THE RESERVE A	e le Galleria	gi. Bila da bişa iya da
HTTP Throughput	25 Mbps	100 Mbps	500 Mbps	3 Obps	6 Gbps
Application Licenses	Unitmited	Unlimited	Unlimited	Unlimited	Unlimited
Administrative Domains		4 to 64 t	based on the amount of memory	aliccated	
Virtual Mechine					
Hypervisor Support	VMware, Microsoft Hyper-V,		Ken, VirtualBox, KVM, Amazon We FortiWeb VM Installation Guida fo		sure, Google Cloud, and Oracle
vCPU Support (Minimum / Maximum)	1	2	2/4	2/8	2/16
Network Interface Support (Minimum / Maximum)	1 / 10	1/10	1/10	1 / 10	1 / 10
Storage Support (Minimum / Maximum)	40 GB / 2 TB	40 GB / 2 TB	40 OB / 2 TB	40 GB / 2 TB	40 GB / 2 TB
Memory Support (Minimum / Maximum)	1024 MB / Unlimited for 64-bit	1024 MB / Unlimited for 64-bit	1024 MB / Unlimited for 64-bit	1024 MB / Unlimited for 64-bit	1024 MB / Unlimited for 54-bit
Recommended Memory	8 OB	8 GB	1 <b>6</b> GB	32 GB	64 QB
High Availability Support	Yes	Yes	Yes	Yes	Yes

Actual performance values may vary depending on the network traffic and system configuration. Performance matrics were observed using 4 x intel(R) Xaon(R) Gobt 62.42 CPU @ 2.800Hz numing VMwere 63N 67 with 8 GB of VRAM sasigned to the 1 vCPU and 2 vCPU FortiWeb Virtual Appliance, 16 GB assigned to the 4 vCPU, 32 GB assigned to the 8 vCPU and 64 GB assigned to the 6 vCPU critical Power of VCPU.

CONTAINER APPLIANCES	FORTIWED VMCCT	FOR DWEB-JMC62	+ ORT-AN R-AWCOR	FOR F-VyCes (PA) (42)
System Performance				
HTTP Throughput (Maximum)	25 Mbps	100 Mbps	500 Mbps	3 Gbps
Application Licenses	Deliminu	Unlimited	Unilmited	Unlimited
Administrative Domains		4 to 64 based on the any	ount of memory allocated	
Virtual Appliance				
Conteiner Manager Support		Doc	oker	
Network (nterfece Support (Minimum / Maximum)	1 / 10	1 / 10	1 / 10	1/10
Storage Support (Minimum / Maximum)	30 GB / 500 GB	30 GB / 500 GB	30 GB / 500 GB	30 GB / 500 GB
Memory Support (Minimum)	4 GB	4 GB	4 GB	4 GB
Recommended Memory	8 GB	8 98	8 GB	8 GB
High Availability Support	No	No	No	No

Throughputs and other metrics are maximum values permitted for each version. Actual performance values may very depending on the network traffic and system configuration.

FCC Class A Part 15, RCM, VCCI, CE, UL/CB/cUi,

**E3** 

FCC Class A Part 15, RCM, VCCI, CE, UL/CB/cUL



## **ORDER INFORMATION**

Product	sku	Openington
PortiWeb 1006	FWB-100E	Web Application Firewall — 4x GE RJ45 ports, 4 GB RAM,1× 32 GB SSD storage.
FortiWeb 400E	FWB-400E	Web Application Firewall — 4x GE RJ45 ports, 4x GE SFP ports, 480 GB SSD storage.
ForsiWeb 600E	FWB-600E	Web Application Firewall — 4x GE RJ45 ports (2x bypass), 4x GE SFP ports, 480 GB SS0 storage,
Forti Wisb 1000F	FW8-1000F	Web Application Firewall — 2× 10 GE SFP+ ports, 8x GE RJ45 bypasa ports, 4x GE SFP ports, 2 x GE management ports, dual AC power supplies, 2× 480 GB SSD storage
Forti Web 2000F	FWB-2000F	Web Application Firewall - 4 × 10GE SFP+ ports, 4 x GE R145 bypass ports, 4 x GE SFP ports, 2 x GE management ports, dual AC power supplies, 2×480G8 SSD storage.
ForWieb 3000F	FWB-2000F	Web Application Firewall - 10 × 10GE SFP+ ports (2 bypess), 8 x GE RJ45 bypass ports, 2 x GE management ports, duel AC power supplies, 2×860GB SSD storage.
ForEWab 4000F	PWB-4000F	Web Application Fitewall - 2 × 400E bypass ports, 10 × 10EE SFP+ ports (2 bypass), 8 x GE RJ45 bypass ports, 2 x GE management ports, dual AC power supplies, 2×960GB S9D storage.
PortiWeb-YM01	FWB-VM01	FortiWeb-VM, up to 1 vCPU supported. 64-bit OS.
FortfWeb-VM02	FWB-VM02	FortiWeb-VM, up to 2 vCPUe supported, 64-bit OS.
ForeWeb-VM04	FWB-VM04	FortiWeb-VM, up to 4 vCPUs supported, 84-bit OS.
Porti Web-VMOR	FW8-VM08	FortiWeb-VM, up to 8 vCPUs supported. 64-bit OS.
FortiWeb-VM10	FW8-VM16	FortiWeb-VM, up to 16 vCPUs supported. 64-bit OS.
ForEWeb-VMC01	FW8-VMC01	FWB-VMC01 for container-based environments. Up to 25 Mbps throughput.
For#Web-VMCQ2	FW8-VMC02	FW6-VMC02 for container-based environments. Up to 100 Mbps throughput,
PertiWeb-VM004	FWB-VMC04	FW8-VMC04 for container-based environments, Up to 500 Mbps throughput.
Forti Wate-VMC08	FWB-VMC08	FWB-VMC08 for container-based environments. Up to 2 Gbps throughput.
Control Manager 10	FWB-CM-BASE	FortiWeb Central Manager license key, manage up to 10 FortiWeb devices, VMware vSphans,
Cardral Manager Unlimited	FWB-CM-UL	FortiWeb Central Manager Roanse key, manage unlimited number of FortiWeb devices, VMware vSphere.

The following SKUs adopt the annual subscription licensing scheme:

Preduct	SKU	Description
PortiWisb-VMO1-8 Standard	FC1-10-WBVMS-918-02-DD	Subscription Scense for FortiWeb-VM (1 CPU) with Standard bundle included.
ForeWeb-VM01-8 Advanced	FC1-10-WBVMS-633-02-DD	Subscription license for FortWeb-VM (1 CPU) with Advanced bundle included.
PortiWeb-VM02-8 Standard	F02-10-WBVMS-916-02-DD	Subscription license for FortiWeb-VM (2 CPU) with Standard bundle included.
PersiWeb-VM02-8 Advanced	FC2-10-WBVM8-633-02-DD	Subscription license for FortWeb-VM (2 CPU) with Advanced bundle included.
ForeWeb-VM04-8 Standard	FC3-10-W8VMS-916-02-DD	Subscription license for FortiWeb-VM (4 CPU) with Standard bundle included.
PortWeb-VM04-8 Advanced	FC3-10-WBVMS-633-02-DD	Subscription license for FortiWeb-VM (4 CPU) with Advanced bundle included.
FertiWeb-VMG8-E Standard	FC4-10-WBVMS-016-02-DD	Subscription license for FortWeb-VM (8 CPU) with Standard bundle included.
FortiWeb-VMG8-8 Advanced	FC4-10-WBVMS-633-02-DD	Subscription license for FortiWeb-VM (8 CPU) with Advanced bundle included.
For #Web-VM18-8 Standard	FC8-10-WBVM3-916-02-DD	Subscription license for FortiWeb-VM (16 CPU) with Standard bundle included.
PortiVisb-VM16-8 Advanced	FC5-10-WBVMS-693-02-DD	Subscription license for FortiWeb-VM (18 CPU) with Advanced bundle included.

## FURTINET

www.fortinet.com

realizes grains may be transmitted or commencation comman. Performes are not other money commenced and commenced a

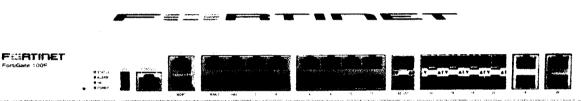
islability for all though eybarbordly, who reages for human rights and achies) business practices, making possible a dights hand you can plany trust. You represent and interest to fortiset that you will not save furthering a way may, industries or wherein of shapes digits, industries those simpless, despite the process are represent to represent the process are required to example with the follows IVULA interesting and the common law required to the process are required to example with the follows IVULA interesting and the common law required existings of the follows of the IVULA interesting and the process are required to example the follows and the IVULA interesting and the process are required to the follows and the requirement of the IVULA interesting and IVULA interesting an



# FortiGate 100F Series

FG-100F and FG-101F





## **Highlights**

## **Gartner Magic Quadrant** Leader for both Network Firewalls and WAN Edge Infrastructure.

Security-Driven **Networking FortiOS** delivers converged networking and security.

## State-of-the-Art **Unparalleled Performance** with Fortinet's patented / SPU / vSPU processors.

**Enterprise Security** with consolidated Al / ML-powered FortiGuard

Deep Visibility

Services.

into applications, users, and devices beyond traditional firewall techniques.

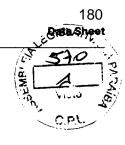
## AI/ML Security and Deep Visibility

The FortiGate 100F Series NGFW combines Al-powered security and machine learning to deliver Threat Protection at any scale. Get deeper visibility into your network and see applications, users, and devices before they become threats,

Powered by a rich set of AI/ML security capabilities that extend into an integrated security fabric platform, the FortiGate 100F Series delivers secure networking that is broad, deep, and automated. Secure your network end to end with advanced edge protection that includes web, content, and device security, while network segmentation and secure SD-WAN reduce complexity and risk in hybrid IT networks.

Universal ZTNA automatically controls, verifies, and facilitates user access to applications, reducing lateral threats by providing access only to validated users. Ultra-fast Threat Protection and SSL Inspection provides security at the edge you can see without impacting performance.

IPS	NGFW	Threat Protection	Interfaces	
2.6 Gbps	1.6 Gbps	1 Gbps	Multiple GE RJ45, GE SFP and 10 GE SFP+ slots	





Available in



**Appliance** 



Virtual



Hosted





## **FortiOS Everywhere**

## FortiOS, Fortinet's Advanced Operating System

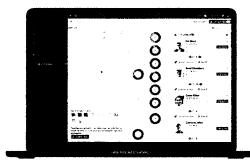
FortiOS enables the convergence of high performing networking and security across the Fortinet Security Fabric. Because it can be deployed anywhere, it delivers consistent and context-aware security posture across network, endpoint, and multi-cloud environments.

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 a simplified, single policy and management framework. Its organically built best-of-breed capabilities, unified operating system, and ultra-scalability allows organizations to protect all edges, simplify operations, and run their business without compromising performance or protection.

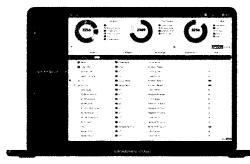
FortiOS dramatically expands the Fortinet Security Fabric's ability to deliver advanced Al/ ML-powered services, inline advanced sandbox detection, integrated ZTNA enforcement, and more, provides protection across hybrid deployment models for hardware, software, and Software-as-a-Service with SASE.

FortiOS expands visibility and control, ensures the consistent deployment and enforcement of security policies, and enables 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 Migration 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**

# STATE OF STA

## **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

Services address numerous security use cases across application usage as well as overall data security. This 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. Separately, our Inline Cloud Access Security Broker (CASB) service protects data in motion, at rest, and in the cloud. The service enforces major compliance standards and manages account, user and cloud application usage. Services also include capabilities designed to continually assess your infrastructure, validate that configurations are working effectively and secure, and generate awareness of risks and vulnerabilities that could impact business operations. This includes coverage across IoT devices for both IoT detection and IoT vulnerability correlation.

## **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.

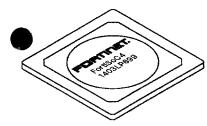
## **Secure Any Edge at Any Scale**

# STOREGISLAIN, PROGRAMMENT STOREGISLAIN, PROG



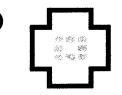
## Powered by Security Processing Unit (SPU)

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.



## Powered by Purpose-Built Secure SD-WAN ASIC SOC4

- 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
- Reduces environmental footprint by saving on average over 60% in power consumption compared to previous generation of FortiGate models



## **FortiCare Services**

Fortinet is dedicated to helping our customers succeed, and every year FortiCare Services help thousands of organizations get the most from our Fortinet Security Fabric solution. Our lifecycle portfolio offers Design, Deploy, Operate, Optimize, and Evolve services. Operate services offer device-level FortiCare Elite service with enhanced SLAs to meet our customer's operational and availability needs. In addition, our customized account-level services provide rapid incident resolution and offer proactive care to maximize the security and performance of Fortinet deployments.









## **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 WAN Edge powered by one OS and unified security and management framework and systems transforms and secures WANs
- Delivers superior quality of experience and effective security posture for work-from-any where models, SD-Branch, and cloud-first WAN use cases
- Achieve operational efficiencies at any scale through automation, deep analytics, and self-healing



## **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



## Segmentation

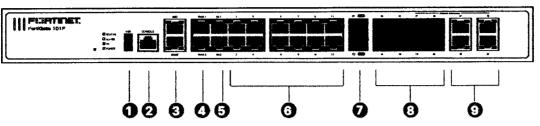
- Dynamic segmentation adapts to any network topology to deliver true end-to-end security—from the branch to the datacenter and across multi-cloud environments
- Ultra-scalable, low latency, VXLAN segmentation bridges physical and virtual domains with Layer 4 firewall rules
- Prevents lateral movement across the network with advanced, coordinated protection from FortiGuard Security Services detects and prevents known, zero-day, and unknown attacks

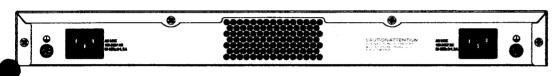


de Oliveira.

## **Hardware**

## FortiGate 100F Series





## Interfaces

- 1. 1 x USB Port
- 2. 1 x Console Port
- 3. 2 x GE RJ45 MGMT/DMZ Ports
- 4. 2 x GE RJ45 WAN Ports
- 5. 2 x GE RJ45 HA Ports
- 6. 12 x GE RJ45 Ports
- 7. 2 × 10 GE SFP+ FortiLink Slots
- 8. 4 x GE SFP Slots
- 4 x GE RJ45/ SFP Shared Media Pairs

## **Hardware Features**



## **Dual Power Supplies**

Power supply redundancy is essential in the operation of mission-critical networks. The FortiGate 100F Series offers dual built-in non-hot swappable power supplies.

## **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.





185



# Specifications

Contract Portion   Transcriptor	1		2000	ansoloTthof to redmuM mumixsM
Action of Strongs   10 to 00   1 to 00 B			128 / 64	edAthort to nedmust mumixeM (lounut \ leant)
Marine   Domestra Berlands   10 / 10   10   10   10   10   10   10	1		35	
The office of the process of the control throughout (2014) 100 to the control throughout (2014) 1119 (100) 111				
See   Part   P			12 Gpbe	CAPWAP Throughput (HTTP 6410)
See   Part   P				£ 0469 9TT
Comboard Scronge O 1 x 480 GB SSD Redundant Power Supplies Well Interactive Part Proceeding Throughput (Packer Part)  Fig. 1 For John Throughput (St. byte) 1 Complete Throughput (St. byte) 2 Computer Scenario Concurrent Seasions (CPP) 1 Computer Scenario Concurrent Seasions (CPP) 2 Computer Scenario Concurrent Seasions (CPP) 3 Computer Scenario Concurrent Sci. Con			sadə S.S.	
Charge   Concurrent Season   Contract Season			135 000	SSL Inspection Concurrent Session (pp., avg., HTTPS) *
Concurrent Set-Vew Introughout:  Set Prescript Introughout:  Concurrent Set-Vew Introughout:  Set Prescript Introughout:  Set Set Set Introughout:  Set Set Set Introughout:  Set Set Set Set Introughou			0081	SSL inspection CPS (iPS, avg. HTTPS) *
Concurrent Sci. 29th Harvest H			1 Gpbs	SSL inspection Throughput (IPS, avg. HTTPS) 3
Concernant Sessions (TCP)  Sel-vMN Throughput (STS byte)  Travel French Here Diseases Port (Dient's Concernant Sessions (TCP)  French Here Introduction (Percent of Throughput (STS byte))  French Here Introduction (Pe	le	. בשמעות ל מספסה היו הווים בהא בשמעות ל מהגד לחו	005	
Conside Port Consideration of Taraban Seatons For Transcriptor Consideration of Taraban Seatons For Transcriptor (572 byts) 11.5 Gbps Consideration of Taraban I Transcriptor (572 byts) 11.5 Gbps Consideration of Taraban I Transcriptor (572 byts) 12.5 Hillion Compilance and Capacity (572 byts) 12.5 Hillion Compilance and Capacity (572 byts) 12.5 Hillion Compilance and Capacity (573 byts) 12.5 Hillion Compilance and Capacity (573 byts) 12.5 Hillion Compilance and Capacity (574 byts) 12.5 Hillion Compilance	(4	the Lift waste two testiling based venter ! *	i Gpbs	SSE-YPM Throughput
Concurrent Seasions (TCP)  Passes VPN Throughput (ST2 byts) 1 11.5 Gbps  Concurrent Seasions (TCP)  Firewall Invoughput (ST2 byts) 1 15. Million  Concurrent Seasions (TCP) 2 6 000  The War Seasions (TCP) 3 6 000  The War Seasions (TCP) 4 000  To More VPN Throughput (ST2 byts) 1 15. Million  Concurrent Seasions (TCP) 2 6 000  To More VPN Throughput (ST2 byts) 1 15. Million  Concurrent Seasions (TCP) 2 6 000  To More VPN Throughput (ST2 byts) 1 15. Million  Concurrent Seasions (TCP) 2 6 000  To More VPN Throughput (ST2 byts) 1 15. Million  To More VPN Throughput (ST2 byts			16 000	Client-to-Gateway Psec VPM Turnels
Concurrent Scrage Onbeard Scrage Onb			S000	Geteway-to-Geteway iPsec VPN Turnels
Console Port Console Port Console Port 1 14.480 GB SSD Redundant Power Supplies (Default dust non-swappable AC PSU for Throughput 2-1			11.5 Gbps	Pase VPM Throughput (512 byte)
Console Port Conso	04.4/04050	enumentus en	000 01	Firewall Policies
Console Port Console Port 1 Heat Disaplation 7 Heat Disaplation 7 1 Heat Disaplation 7 1 19.1.13 BTU/h 12.1.13 BTU/h 7 12.1.13 BTU/h 7 12.1.13 BTU/h 7 12.1.2 BTU/h 7 12.1.			29 000	Hew Sessions/Second (TCP)
Console Port Console Port 10006 BTU/h 12113 BTU/h  Console Port Console Port 10006 BTU/h  Included Transcaivers 0 1x 480 GB SSD 1000 BTU/h  Product Storege Enterprise Trailing Mix 1000 BTU/h  System Performance — Enterprise Trailing Mix 1000 BTU/h  By A Finance Included Transcaivers 1000 BTU/h  System Performance and Capacity 1000 BTU/h  System Performance and Capacity 1000 BTU/h  Purnish STS (64 byte, UDP) 1000 BTU/h  Purnish STS (64 byte, UDP) 1000 BTU/h  Sol 18 / 10 Gbps 1000 BTU/h  Humidity 1000 BTU/h  Humidity 1000 BTU/h  Humidity 1000 BTU/h  Humidity 1000 BTU/h  Sol 18 / 10 Gbps 1000 BTU/h  Humidity 1000 BTU/h  Humidity 1000 BTU/h  Sol 18 / 10 Gbps 1000 BTU/h  Humidity 1000 BTU/h  Sol 18 / 10 Gbps 1000 BTU/h  Humidity 1000 BTU/h  Humidity 1000 BTU/h  Sol 18 / 10 Gbps 1000 BTU/h  Humidity 1000 BTU/h  Sol 18 / 10 Gbps 1000 BTU/h  Humidity 1000 BTU/h  Hum		Compliance	noilliM 2.f	Concurrent Sessions (TCP)
Console Port Console Port 10.06 BTU/h 121.13 BTU/h Console Port Console Port 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(m 840E) 11 000 01 o1 qU	sbuttiA gnbrisqO	25 Mpps	Firewall Throughput (Packet per Second)
Console Port Console Port 10.06 BTU/n 121.13 BTU/n Heat Densel Storage 10.06 BTU/n 121.13 BTU/n 10.06 BTU/n 121.13 BTU/n 10.06	Zide to Back	Forced Airflow	24 YE.A	Firewall Latency (64 byte, UDP)
Console Port Console Port Console Port 1 121.13 BTU/h  Console Port Console Port 1 121.13 BTU/h  Console Port Console Port Console Port 1 121.13 BTU/h  Console Port Console Port Console Port 1 121.13 BTU/h  Console Port Consol	A8b A.0A	Noise Level	sdno ou / 91 / 07	(ISI8 / SIS / 64 byte, UOP)
Console Port Console Port 17:13 BTU/n 19:00 BTU/n 19:13 BTU/n 19:00 BTU/n 19:13 BTU/n 19:00 BTU/n 19:13 BTU/n 19:00 BTU/n 19:0	gniansbroo-non %06-%01	Mimidity	30138130	
Console Port 100.6 BTU/h 121.13 BTU/h 120.00	-31128at (-3210 <sub>0</sub> C)	enuterequel egenot?	- 4	_
Console Port Console Port 17.13 BTU/n 10.06 BTU/n BTU/n 10.0	350-1040E (00-400C)	enuterequeT gathereqO	The second secon	The same of the sa
System Performance — Enterprise Traffic Mix  Console Port  Onboard Storage  On 1x 480 GB SSD  Redundant Power Supply Efficiency Rating (Default dual non-ewappable AC PSU for 1+1 Redundancy)  1+1 Redundancy  1+2 Redundancy  1+3 Redundancy  1+3 Redundancy  1+3 Redundancy  1+4 Redundancy		Operating Environment and Certifications	and the second s	
Console Port 100.6 BTU/h 121.13 BTU/h Console Port 1 Heat Disalpation 100.6 BTU/h 121.13 BTU/h Onboard Storage 0 1× 480 GB SSD Redundant Power Supplies Yes Onboard Storage 0 1× 480 GB SSD Redundant Power Supplies (Default dual non-swappable AC PSU for	80Plus Compliant	Power Supply Efficiency Rating	2.6 Gbps	
Console Port Console Port Onboard Storage On 1× 480 GB SSD Redundant Power Supplies (Default dust non-ewappable AC PSU for	1+1 gegnugauck)		0	ECCOSO IUNISCHARIS
Console Port 100.6 BTU/h 121.13 BTU/h		eaudha ann a timriman		
41120 0707				
4201,000				
GE B742 OL SEA SPAIRE LOUIS . (NACLESO   MEDILURIU)	V507/W/C V17/WO1		and the second s	
GE B145 or SEP Shared Ports 2 (Neurage / Madmum)  CE B145 or SEP Shared Ports 2	W 1.95 W 35.3 W 39.1 W	Power Consumption		
FortilLink Stote (default) AC Power Supply 100-240V AC, 50/60 Hz	100-240V AC, 50/60 Hz	AC Power Supply	•	
Herdware Accelerated 10 GE SFP+ 2 (supports ElA/non-ElA standards) Herdware Accelerated 10 GE SFP+ 2 (supports ElA/non-ElA standards)	ON 1 THROW YORK		<b></b>	
(Bu care) colory (Bu care) colory analysis and care analysis and c		na kanala sa kata ana ana ana ana ana ana ana ana ana	<b>7</b>	man and the second seco
ASS × SSA × SAA (mm) rignel x width x lignel 1/2/f SALS SA SEA SEA SEA SEA SEA SEA SEA SEA SEA			1/7/1	Hardware Accelerated GE RJAS Strongement/ HA/ IDMS ports
Hardwere Accelerated GE R.McT				
Interfaces and Modules Dimensions and Power	01 ~ 21 ~ 62 1		ate eggs	
FORTIGATE 100F FORTIGATE 101F FORTIGATE 101F	TIOL START NOT TOOL START N		TOTAL FORTIGALE TOTAL	

- \* 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.
- Uses RSA-2048 certificate.
- Note: All performance values are "up to" and vary depending on system configuration.

Active-Active, Active-Passive, Clustering

- 1 IPsec VPN performance test uses AES256-SHA256.
- with Logging enabled. PPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured
- \$ SSL Inspection performance values use an average of HTTPS sessions of different
- cibuel snites.



High Availability Configurations





# **Ordering Information**

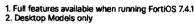
Product (See Section )	SKU	Description (1997)
FortiGate 100F	FG-100F	22x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x Mgmt port, 2x HA ports, 16x switch ports with 4 SFP port shared media), 4 SFP ports, 2× 10 GE SFP+ FortiLinks, dual power supplier redundancy.
FortiGate 101F	FG-101F	22x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x Mgmt port, 2x HA ports, 16x switch ports with 4 SFP port shared media), 4 SFP ports, 2×10 GE SFP+ FortiLinks, 480GB onboard storage, dual power supplies redundancy.
Optional Accessories	SKU	Description
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.
1 GE SFP LX Transceiver Module	FN-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.
10 GE SFP+ RJ45 Transceiver Module	FN-TRAN-SFP+GC	10 GE SFP+ RJ45 transceiver module for systems with SFP+ slots.
10 GE SFP+ Transceiver Module, Short Range	FN-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	FN-TRAN-SFP+LR	10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Transceivers, Extended Range	FN-TRAN-SFP+ER	10 GE SFP+ transceiver module, extended range for all systems with SFP+ and SFP/SFP+ slots.
10GE SFP+ Transceiver Module, 30 km Long Range	FN-TRAN-SFP+BD27	10GE SFP+ transceiver module, 30KM long range single BiDi for systems with SFP+ and SFP/ SFP+ slots (connects to FN-TRAN-SFP+BD33, ordered separately).
OGE SFP+ Transceiver Module, 30 km Long Range	FN-TRAN-SFP+BD33	10GE SFP+ transceiver module, 90KM long range single BiDi for systems with SFP+ and SFP/ SFP+ slots (connects to FN-TRAN-SFP+BD27, ordered separately).
10 GE SFP+ Passive Direct Attach Cable 1m	FN-CABLE-SFP+1	10 GE SFP+ passive direct attach cable, 1m for systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Passive Direct Attach Cable 3m	FN-CABLE-SFP+3	10 GE SFP+ passive direct attach cable, 3m for systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Passive Direct Attach Cable 5m	FN-CABLE-SFP+5	10 GE SFP+ passive direct attach cable, 5m for systems with SFP+ and SFP/SFP+ slots.



X B 8

## **Subscriptions**

Service Category	Service Offering	A-le-carte	Enterprise Protection	Unified Threat Protection	Advanced Threat Protection	
	PS Service					
FortiGuerd Security Services	Anti-Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	•	
	URL, DNS & Video Filtering Service	•	•	•		
	Anti-Spem		•	•		
	Al-based Inline Maturare Prevention Service	•	•			
	Data Loss Prevention Service 1	•	•			
	OT Security Service (OT Detection, OT Vulnerability correlation, Virtual Patching, OT Signature / Protocol Decoders) 1	•				
	Application Control		included with For	tiCare Subscription		
	CASS SasS Control		included with For	tiCare Subscription		
SD-WAN and SASE Services	SD-WAN Underlay Bandwidth and Quality Monitoring Service	•				
	SD-WAN Overlay-as-a-Service for SeaS-based overlay network provisioning	•				
	SD-WAN Connector for FortiSASE Secure Private Access	•				
	FortiSASE subscription including cloud management and 10Mbps bandwidth license <sup>2</sup>	•				
NOC and SOC Services	FortiGuard Attack Surface Security Service (IoT Detection, IoT Vulnerability Correlation, and Security Rating Updates) 1	•	•			
	FortiConverter Service	•	•			
	Managed FortiGate Service	•				
	FortiGate Cloud (SMB Logging + Cloud Management)	•				
	FortiAnalyzer Cloud	•				
	FortiAnalyzer Cloud with SOCaeS	•				
	FortiGuerd SOCaeS	•				
Herdware and	FortiCare Essentials	•				
Software Support	FortiCere Premium	•	•	•	•	
	FortiCare Elite	•				
Base Services	Internet Service (SasS) DB Updates					
	GeoIP DB Updates		included with Cort	tiCare Subscription		
	Device/OS Detection Signatures		INCIGOGO WILLIEU	cost outdonption		
	Trusted Certificate DB Updates					
	DDNS (v4/v6) Service					







### **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 Elite**

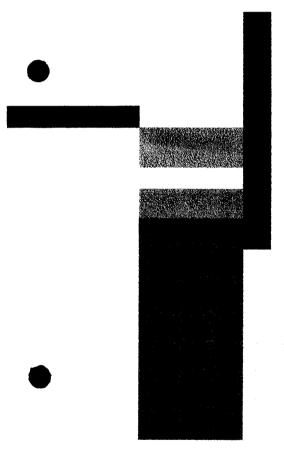
FortiCare Elite offers enhanced SLAs and quick issue resolution through a dedicated support team. It provides single-touch ticket handling, extended Extended End-of-Engineering-Support for 18 months, and access to the new FortiCare Elite Portal for a unified view of device and security health.





### **Fortinet CSR 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.



## FERTINET.

www.fortinet.com

Copyright © 2023 Forthet, Inc., and other Forthet, inc., and other Forthet, inc., and other Forthet, inc. All rights reserved. Fortificate, FortiGater, All other product or company nemos may be trademarks of their respective owners. Performence and other meetics contained herein were attained in internal lab tests under ideal conditions, and actual performence results. Nothing herein represents any binding commitment by Fortified, and Fortified decisions are written as were implicit, except to the extent Fortified residing written contract, signed by Fortified General Paumas, with a purchase that expressly wermant, that the identified product will perform accounting to contain approach, express and instance metrics expressly identified in such binding written contract shall be binding on Forthet. For absolute clarify, any such werranty will be limited to performence in the same ideal conditions as in Fortnet's internal lab tests. Fortified decisions in full any covenants, representations, and garantees pursuant hereto, whether express or implied, Fortified reserves the right to charge, nogify, transfer, or glammus.

October 17, 2023

FG-100F-DAT-R34-20231017

## FERTINET.

## FortiGate 400E Series

FG-400E, FG-401E, and FG-401E-DC





### **Highlights**

### Gartner Magic Quadrant Leader for both Network Firewalls and WAN Edge Infrastructure.

Security-Driven
Networking FortiOS
delivers converged
networking and security.

### State-of-the-Art Unparalleled Performance with Fortinet's patented /

with Fortinet's patented a SPU / vSPU processors.

### Enterprise Security

with consolidated AI / ML-powered FortiGuard Services.

### Deep Visibility

into applications, users, and devices beyond traditional firewall techniques.

## AI/ML Security and Deep Visibility

The FortiGate 400E Series NGFW combines Al-powered security and machine learning to deliver Threat Protection at any scale. Get deeper visibility into your network and see applications, users, and devices before they become threats.

100 March 1986

Powered by a rich set of AI/ML security capabilities that extend into an integrated security fabric platform, the FortiGate 400E Series delivers secure networking that is broad, deep, and automated. Secure your network end to end with advanced edge protection that includes web, content, and device security, while network segmentation and secure SD-WAN reduce complexity and risk in hybrid IT networks.

Universal ZTNA automatically controls, verifies, and facilitates user access to applications, reducing lateral threats by providing access only to validated users. Ultra-fast Threat Protection and SSL Inspection provides security at the edge you can see without impacting performance.

IPS	NGFW	Threat Protection	Interfaces
7.8 Gbps	6 Gbps	5 Gbps	Multiple GE RJ45 and GE SFP Slots   DC Variant





Available in



**Appliance** 



Virtual



Hosted



Cloud



Container

## **FortiOS Everywhere**

### FortiOS, Fortinet's Advanced Operating System

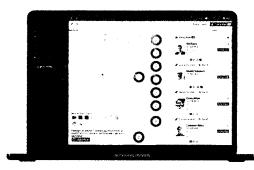
FortiOS enables the convergence of high performing networking and security across the Fortinet Security Fabric. Because it can be deployed anywhere, it delivers consistent and context-aware security posture across network, endpoint, and multi-cloud environments.

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 a simplified, single policy and management framework. Its organically built best-of-breed capabilities, unified operating system, and ultra-scalability allows organizations to protect all edges, simplify operations, and run their business without compromising performance or protection.

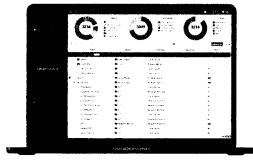
FortiOS dramatically expands the Fortinet Security Fabric's ability to deliver advanced Al/ML-powered services, inline advanced sandbox detection, integrated ZTNA enforcement, and more, provides protection across hybrid deployment models for hardware, software, and Software-as-a-Service with SASE.

FortiOS expands visibility and control, ensures the consistent deployment and enforcement of security policies, and enables 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 Migration 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**

## rvisos

### **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

Services address numerous security use cases across application usage as well as overall data security. This 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. Separately, our Inline Cloud Access Security Broker (CASB) service protects data in motion, at rest, and in the cloud. The service enforces major compliance standards and manages account, user and cloud application usage. Services also include capabilities designed to continually assess your infrastructure, validate that configurations are working effectively and secure, and generate awareness of risks and vulnerabilities that could impact business operations. This includes coverage across IoT devices for both IoT detection and IoT vulnerability correlation.

### **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**

# SPU

### 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**



### **Network Processor 6** NP6

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



### Content Processor 9 CP9

Content Processors act as co-processors to offload resource-intensive processing of security functions. The ninth generation of the Fortinet Content Processor, the CP9, accelerates resource-intensive SSL (including TLS 1.3) decryption and security functions while delivering:

- Pattern matching acceleration and fast inspection of real-time traffic for application identification
- IPS pre-scan/pre-match, signature correlation offload, and accelerated antivirus processing



### **FortiCare Services**

Fortinet is dedicated to helping our customers succeed, and every year FortiCare Services help thousands of organizations get the most from our Fortinet Security Fabric solution. Our lifecycle portfolio offers Design, Deploy, Operate, Optimize, and Evolve services. Operate services offer device-level FortiCare Elite service with enhanced SLAs to meet our customer's operational and availability needs. In addition, our customized account-level services provide rapid incident resolution and offer proactive care to maximize the security and performance of Fortinet deployments.





### **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 WAN Edge powered by one OS and unified security and management framework and systems transforms and secures WANs
- Delivers superior quality of experience and effective security posture for work-from-any where models, SD-Branch, and cloud-first WAN use cases
- Achieve operational efficiencies at any scale through automation, deep analytics, and self-healing



### **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



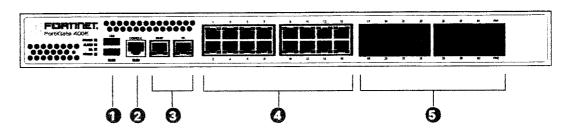
### Segmentation

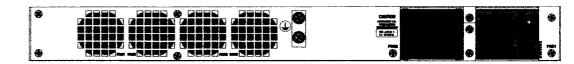
- Dynamic segmentation adapts to any network topology to deliver true end-to-end security—from the branch to the datacenter and across multi-cloud environments
- Ultra-scalable, low latency, VXLAN segmentation bridges physical and virtual domains with Layer 4 firewall rules
- Prevents lateral movement across the network with advanced, coordinated protection from FortiGuard Security Services detects and prevents known, zero-day, and unknown attacks





### FortiGate 400E Series





### Interfaces

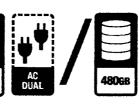
- 1. 2 x USB Ports
- 2. 1 x Console Port
- 3. 2 x GE RJ45 MGMT/HA Ports
- 4. 16 x GE RJ45 Ports
- 5. 16 x GE SFP Slots

### **Hardware Features**











A Silvain

cipher suites.

3 SSL Inspection performance values use an average of HTTPS sessions of different with Logging enabled.

PS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured

15sec VPN performance test uses AES256-SHA256.

High Availability Configurations Meximum Mumber of FortiTokens

serbaline Number of FordSwitches

(mumixel/ \ )iusle() snismo() isut\/

22r justoection CPS (IPS, avg. HTTPS) \*

Concurrent SSL-VPM Users (Recommended Maximum, Tunnel Mode)

Client-to-Geteway Bree VPN Tunnels

GRIBWRY-TO-GRIBWRY IPSEC VPM TURE

Firewall Throughput (Packet per Second)

INCOME (215 PARE) .

New Sessions/Second (TCP)

Concurrent Sessions (TCP)

Pv4 Frawall Throughput (1518 | 512 | 64 byte, UDP)

NGEM Listandiplant 5.4

judynded Transceivers

PS Throughput 29

Onboard Storage RIMS Console Port

Firewall Latency (64 byte, UDP) 746 Firewell Throughput (1518 | 512 | 64 byte, UDP)

System Performance and Capacity

Hardware Accelerated GE 5FP 510ts

Hardware Accelerated GE RJ45 Interfacess

Specifications

juter(sees and Modules

System Performence — Enterprise Traffic Mix

Threst Protection Throughput 28

CAPWAP Throughput (HTTP 6410) (H11P 64K) 2

SSL Inspection Concurrent Sea (IPS, avg. HTTPS) \*

SSL-VPN Throughput

(10th) / (1001)

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

Active-Active, Active-Passive, Clustering

99Z / ZLS 72

01 / 01

148 GpDs

15 Cpbs

000 000 0000

4.8 Gbps

0009 t2 Gpbs

000 09

2000

SO CPDS

000 OL

420 000

36Mpps

214 Jus

35 \ 35 \ 5¢ Gpbe

35 / 35 / 54 GDD2

2 Gpba

e ceps

28 Gbps

SX SEP (SX 1 GE)

7

7.

91

0

£0-400E

5× 540 GB 22D

EG-401E/DC

Maiware Protection enabled.

Threat Protection performance is measured with Firewall, IPS, Application Control and

1 +
1

0/36/96/IPv6	Certifications
FCC Part 15 Class A, RCM, VCCI, CE, UL/	Sonsigno
1 11 70 100V MOD A 20010 31 tred 202	

Up to 7400 ft (2250 m) ebutitiA gribaneqO Side and Front to Back A85 84 Brisnabnoo-non X06-X01 -31--128.t (-32--30-C) 35--104.t (0--40.C) Operating Environment and Certifications 80Plus Compliant hower supply Empleucy reging Redundent Power (Hot Sweppage) lenoitqO YS4 BTU/h **4/018 05**2 Heat Dissipation (шпшкем / обы 112M / 551M DC hower consumbr (Nominal) A9.4 (mumixeM) fromuD DC AS.II 748V to -60V DC DC Power Input AC Current (Maximum) **A**9 100-540V AC, 50/60Hz 112 M \ SSI M W A12 \ W 901 Rack Mount, 1 RU MBION (gal 6.7) adi 6.8f 16.4 ibs (7.4 kg)

(mm) rigges x Arbitw x Inglett 085 × 254 × 34.44 0'SL × 0'ZL × SZ'L

Height x Width x Length (inches) DIMENSIONS SUD NOMBL

EC-400E EG-40JE/DC

FortiGate 400E Series

Data Sheet

## Ordering Information

DC bower Supply

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.
1 GE SFP SX Transceiver Module	FN-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP RJA5 Transceiver Module	FN-TRAN-GC	1 GE SFP RJAS transceiver module for all systems with SFP and SFP/SFP+slots.
1 GE SEP LX Transceiver Module	FIN-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.
Optional Accessories		
Fortigate 407E-DC	EC-TOJE-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 enboard SSD storage, 1 DC power supply.
FortiGate 401E	EC-401E	18x GE RJA5 ports (including 1x MGMT port, 1x HA port, 16x switch ports), 16x GE SFP slots, SPU NP6 and CP9 hardware scoelerated, 2x 2A0 GB onboard SSD storage.
300A #36/tro-7	EC-400E	18x GE RJAS ports (including 1x MGMT port, 1x HA port, 16x switch ports), 16x GE SFP slots, SPU NP6 and CP9 hardware accelerated.
Product	MIS	pescuppou

SP-FG300E-DC-PS DC power supply for FG-401E-DC and FG-1100E-DC.

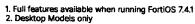




### **Data Sheet**

## **Subscriptions**

					April 1995	
Service Category	Service Offering	A-la-certe	Enterprise Protection	Unified Threat Protection	Advanced Threat Protection	
FortiGuard Security Services	IPS Service	•	•	•	•	
	Anti-Mahware Protection (AMP) — Antivirus, Mobile Mahware, Botnet, CDR, Virus Outbreek Protection and FortiSandbox Cloud Service	•	•	•	•	
	URL, DNS & Video Filtering Service	•	•	•		
	Anti-Spem		•	•		
	Al-based Inline Mahrare Prevention Service	•	•			
	Data Loss Prevention Service 1	•	•			
	OT Security Service (OT Detection, OT Vulnerability correlation, Virtual Patching, OT Signature / Protocol Decoders) 1	•				
	Application Control		included with Fort	Care Subscription		
	CASB SasS Control		included with FortiCare Subscription			
SD-WAN and SASE	SD-WAN Underlay Bandwidth and Quality Monitoring Service	•				
Services	SD-WAN Overlay-as-a-Service for SeaS-based overlay network provisioning	•				
	8D-WAN Connector for FortiSASE Secure Private Access	•				
	FortiSASE subscription including cloud management and 10Mbps bandwidth ficence <sup>2</sup>	•				
NOC and SOC Services	FortiGuard Attack Surface Security Service (IoT Detection, IoT Vulnerability Correlation, and Security Rating Updates)	•	•			
	FortiConverter Service	•	•			
	Menaged FortiGate Service					
	FortiGate Cloud (SMB Logging + Cloud Management)	•				
	FortiAnalyzar Cloud	•				
	FortiAnelyzer Cloud with SOCaeS					
	FortiGuard SOCae8	•				
Hardware and	FortiCare Essentials	•				
Software Support	FortiCare Premium	•	•	•	•	
	FortiCare Eilte	•				
Base Services	Internet Service (SeeS) DB Updates					
	GeoPP DB Updates		included with Forti	Cara Subscription		
	Device/OS Detection Signatures		NEGOCO WAN FOR	oese aduscription		
	Trusted Certificate DB Updates					
	DDNS (v4/v6) Service					





### **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 Elite**

FortiCare Elite offers enhanced SLAs and quick issue resolution through a dedicated support team. It provides single-touch ticket handling, extended Extended End-of-Engineering-Support for 18 months, and access to the new FortiCare Elite Portal for a unified view of device and security health.

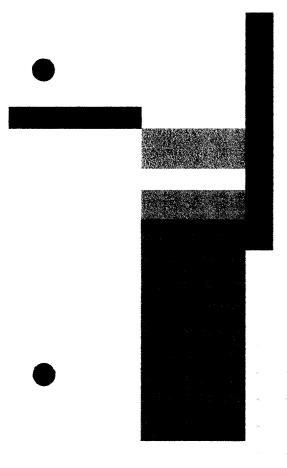


Proposta e Anexos - Teltec Solutions Ltda. Doc. 114754/23. Data: 21/12/2023 20:12. Responsável: Jose E. A. de Oliveira. Impresso por fbarbosa2 em 07/02/2024 10:27. Validação: 269A.BE02.B529.8380.FC18.ED81.647C.88CD.



### **Fortinet CSR 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.



## FWRTINET.

www.fortinet.com

Copyright © 2023 Forther, Inc. All rights reserved. Forthert\*, FortiCate\*, ProftCate\*, ProftCate\*, ProftCate\*, ProftCate\*, Inc. and other marks are registered trademarks of Fortiset, Inc., and other Fortiset needs and/or common law trademarks of Fortiset. All other product or company names may be trademarks of their respective owners. Performance and other medits contained having between trademarks and other results may vary. Network variables, different network engineering and other results may vary. Network variables, different network engineering and other results may vary. Network variables, different network engineering and other results may vary. Network variables, different network engineering and other results may vary. Network variables, different networks, and other results may vary find particular engineering and by Fortishet for particular purposes. The extension of the validation of the validation while his analysis of the same blook conditions as in Fortiset therein while the performance purpose of implicit. Fortiset reserves the regist to change (modify transfer, or otherwise while his additional models and the most current warriable of the validation while his analysis of the same blook conditions as in Fortiset discision without an additional medits and analysis of the validation while his analysis of the validation of the validation while his analysis of the validation while h

October 17, 2023

FG-400E-DAT-R19-20231017

1/9/2