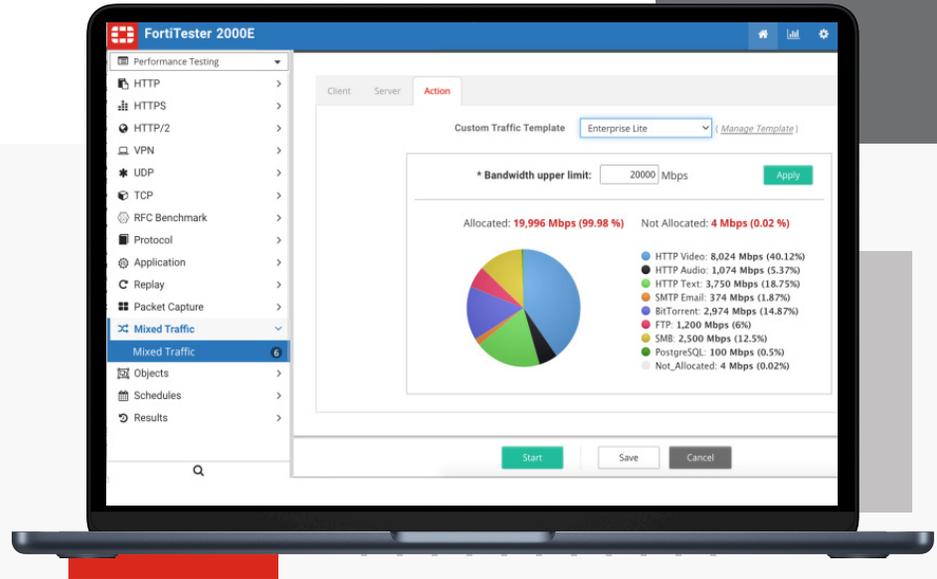


FortiTester



Highlights

- Up-to-date cyber threat simulation based on real world insight
- Best price and performance traffic generation and security testing system
- Flexible operation modes from one standalone device up to 8 devices combined
- Hardware, virtual appliances, and public cloud
- Server-Class hardware and packet-processing enhancements
- Throughput Testing up to 80 Gbps/ 800 Gbps Bi-directional Throughput
- Easy and Simple Web UI

Performance Testing and Breach Attack Simulation

FortiTester is a network security testing tool designed to identify and evaluate network security devices and applications. It can simulate network traffic, including malicious traffic, and test how security devices perform in detecting and mitigating threats. FortiTester supports a wide range of traffic types, including SSL, DDoS, and custom traffic.

It is an easy-to-use tool that allows security teams to assess the effectiveness of their network security solutions before deploying them in production environments. With FortiTester, organizations can ensure that their security infrastructure is capable of defending against advanced threats and is optimized for maximum performance.

Available in



Appliance



Virtual



Hosted



Cloud

Features

Performance Testing and Traffic Generation

HTTP, HTTPS, HTTP/2, UDP Throughput, RFC2544, SSLVPN for FortiGates, and IPSEC testing, Traffic enterprise mix generation, and Q-in-Q traffic generation.

Breach Attack Simulation

MITRE ATT&CK simulation testing, CVE-based IPS testing, Fuzzing testing, Web/IOT attacks, FortiGuard Malware strike pack (with 20+ Ransomware), DDoS traffic generation, and PCAP replay.

Comprehensive API

Automate testing and simulation with full system, test simulation, and reporting API.



Highlights

Traffic Generation and Performance Testing

- HTTP, HTTPS, and HTTP/2
- UDP (PPS/Payload)
- TCP (Throughput, TurboTCP, CPS)
- RFC 2544 / RFC 3511
- SSLVPN and IPSEC testing (CPS/RPS/CC/Throughput)
- PCAP Replay, GTP Replay
- Q-in-Q Traffic Generation
- Scheduled Testing (hourly, daily, monthly)

Traffic Mix

- Enterprise Mix, IMix, Fortinet Enterprise, Enterprise Lite, Custom

Protocol Support

- TCP (CIFS, SMBv2, FIX, FTP, IMAP, LDAP, NFS, POP3, RDP, SMTP, SSH), UDP, DHCP, ICMP, RTSP/RTP, DNS (including DNS-AXFR)

Applications

- Amazon S3, AOL Chat, BitTorrent, DB2, Facebook, Gmail, GTalk, MSSQL, MySQL, NetFlix, Oracle TNS, PSQL, Twitter, WebEx, WhatsApp, Yahoo Mail, YouTube

Flexible Form Factor

- Powerful Appliances with 1G/10G/40G/100G Output
- Up to 80 Gbps and 800 Gbps Bi-Directional Traffic Simulation
- VM Form Factor supporting ESXi, KVM, OpenStack
- Public Cloud Support*: AWS, Azure, Alibaba, GCP, OCI, IBM Cloud
- Test Centre Mode - up to eight devices in cluster (see model compatibility)

Breach Attack Simulation

- MITRE ATT&CK® Adversary Simulation
- Pre and Post Breach Simulation
- Comprehensive Reporting

Comprehensive Reporting

- PDF Exports
- API Retrieval of Cases Result and Reports

Security Testing

- DDoS testing (HTTP/UDP/TCP Session Flood)
- TCP / UDP / ICMP / IP Fuzzing Attack
- IPS Attacks (CVE-based and HTTP Evasion, SCADA/IOT attacks, Buffer Overflow, Code Injection, Path Traversal)
- Malware Strike Pack (Updated by FortiGuard daily with categories such as Ransomware and Trojan)
- Web Attacks (Cross Site scripting, SQL injection, Bad Robots, Privilege Escalation)
- Web Crawler (bulk URL replay)

Extensive API Support

- Case Management
- System Management
- Object Management
- User Management
- MITRE ATT&CK Management

Third Party Integration

- Administrator and RADIUS Support
- SYSLOG
- SNMP Traps and MIBs Support
- Certification Management
- FortiOS v7.0.1+ (Security Fabric Integration)
- FortiManager v6.4.6 and 7.0.1 (License activation and FortiGuard server updates)
- FortiSIEM v5.3.0 log integration

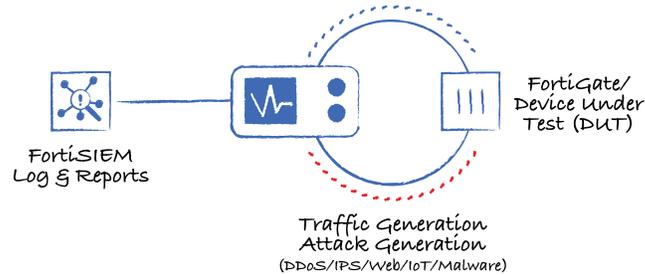
* BYOL support for public cloud, contact SE if images are not available on market place.



DEPLOYMENT

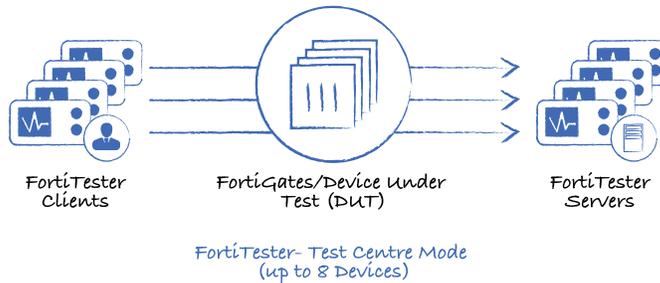
Standalone Mode

Test center works with the local traffic generator and receiver.



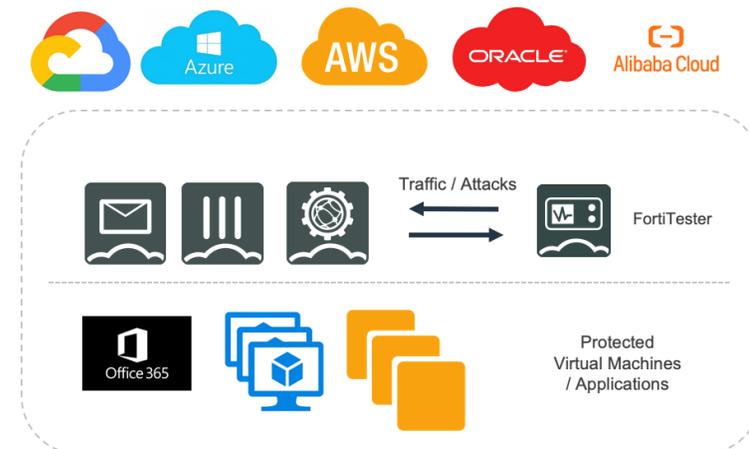
Test Centre Mode

Scale FortiTester performance by combining up to eight FortiTesters in a cluster.



Public Cloud Support

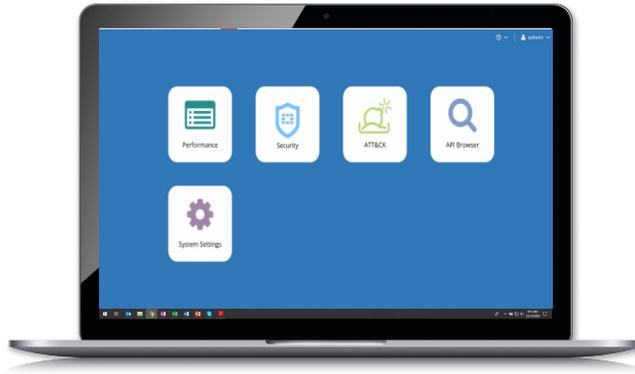
Scale FortiTester performance by combining up to eight FortiTesters in a cluster.



DEPLOYMENT

Intuitive GUI

FortiTester features a simple, easy to use, and intuitive graphic user interface.



Use Cases

Secure Infrastructure Validation

- Evaluate Advanced Threat Protection (ATP) Technology
 - Validate Technology, People, and Process
-

Breach Attack Simulation

- MITRE ATT&CK® Simulation
 - Pre/Post Breach Simulation
-

Vendor Bake-Off

- Datasheet Performance Evaluation
 - Future Proofing
-

Public Cloud Testing

- AWS, Azure, GCP, OCI, IBM, Alibaba
- Architecture Validation
- Load Testing in Marketplaces

SPECIFICATIONS

	FORTITESTER 100F		FORTITESTER 2000F	
Hardware Specifications				
Total Interfaces	2x 10 GE SFP+, 2x GE SFP, 2x GE RJ45, 1x Console GE RJ45, 1x Management GE RJ45, 2x USB 3.0		4x 10 GE SFP+ slots, 1x Management GE RJ45 port	
Storage	1 TB HDD		1 TB HD	
Form Factor	1U		2U	
SSL Acceleration Card	No		No	
Performance Examples and Application Support				
	Standalone Mode	Test Center Mode with 8 Devices	Standalone Mode	Test Center Mode with 8 Devices
HTTP Throughput	10.0 Gbps	80.0 Gbps	20.0 Gbps	160.0 Gbps
HTTP Connections Per Second	700 000	5 600 000	961 000	7 200 000
HTTP Concurrent Connections	9 000 000	72 000 000	9 000 000	72 000 000
SSL Throughput	9.9 Gbps	79.6 Gbps	15 Gbps	118.4 Gbps
SSL Connections Per Second	2500	10 000	18 000	84 000
SSL Concurrent Connections	80 000	640 000	80 000	640 000
IPsec	Yes	Yes	Yes	Yes
SSL-VPN	Yes	Yes	Yes	Yes
Protocol TCP (CIFS, SMB, FIX, FTP, IMAP, LDAP, NFS, POP3, RDP, SMTP, SSH), UDP, DHCP, ICMP, RTSP/RTP	Yes	Yes	Yes	Yes
RFC2544 and 3511	Yes	Yes	Yes	Yes
IPS, Malware, MITRE ATT&CK, FUZZING, and DDOS	Yes	Yes	Yes	Yes
Replay — PCAP, Traffic, Attack, GTP	Yes	Yes	Yes	Yes
Traffic Mix (Enterprise / Lite / Fortinet Mix)	Yes	Yes	Yes	Yes
Dimensions and Power				
Height x Width x Length (inches)	1.73 × 17.32 × 19.69		1.73 × 17.24 × 22.83	
Height x Width x Length (mm)	44 × 440 × 500		44 × 438 × 580	
Weight	15.9 lbs (7.2 kg)		16.31 lbs (7.4 kg)	
Power Required	100–240V AC, 50–60 Hz, 6A–3A		100–240VAC, 63–47 Hz, Redundant	
Power Consumption (Average / Maximum)	90W / 120W		216 W / 240 W	
Maximum Current	120V/6A, 240V/3A		120V/5A, 240V/3A	
Heat Dissipation	477 BTU/h		819 BTU/h	
Redundant Power Supplies	No		Yes	
Environment				
Operating Temperature	32°–104°F (0°–40°C)		32°–104°F (0°–40°C)	
Storage Temperature	-4°–167°F (-20°–75°C)		-4°–158°F (-20°–70°C)	
Humidity	5%–90% non-condensing		5%–90% non-condensing	
Operating Altitude	Up to 7400 ft (2250 m)		<2000 m	
Compliance				
Regulatory Compliance	FCC, ICES, CE, RCM, VCCI, BSMI (Class A)		FCC Part 15 Class A, ICES, CE, RCM, VCCI	
Safety	U/cUL, CB, BSMI		UL/cUL, CB, BSMI	

FortiTester 2000F/2500E – Based on SSL/TLS cipher suite: AES256-GCM-SHA384 with 2K key size.



SPECIFICATIONS

FORTITESTER 2500E		FORTITESTER 3000F		
Hardware Specifications				
Total Interfaces	4 × 10 GE SFP+ slots, 1x Management GE RJ45 port		2 × 40GE QSFP (breakout to 4 × 10GE SFP+ supported), 1 x GE RJ45(mgmt)	
Storage	1 TB HD		2 TB	
Form Factor	1U		1U	
SSL Acceleration Card	Yes		Yes	
Performance Examples and Application Support				
	Standalone Mode	Test Center Mode with 8 Devices	Standalone Mode	Test Center Mode with 8 Devices
HTTP Throughput	20.0 Gbps	160.0 Gbps	39.94 Gbps	316.00 Gbps
HTTP Connections Per Second	1 035 000	8 135 000	2 500 000	16 000 000
HTTP Concurrent Connections	9 000 000	72 000 000	36 000 000	308 000 000
SSL Throughput	14.07 Gbps	109.92 Gbps	39.93 Gbps	316.00 Gbps
SSL Connections Per Second	16 900	128 400	60 000	360 000
SSL Concurrent Connections	80 000	640 000	320 000	2 560 000
IPsec	Yes	Yes	Yes	Yes
SSL-VPN	Yes	Yes	Yes	Yes
Protocol TCP (CIFS, SMB, FIX, FTP, IMAP, LDAP, NFS, POP3, RDP, SMTP, SSH), UDP, DHCP, ICMP, RTSP/RTP	Yes	Yes	Yes	Yes
RFC2544 and 3511	Yes	Yes	Yes	Yes
IPS, Malware, MITRE ATT&CK, FUZZING, and DDOS	Yes	Yes	Yes	Yes
Replay — PCAP, Traffic, Attack, GTP	Yes	Y	Yes	Yes
Traffic Mix Enterprise / Lite / Fortinet Mix	Yes	Yes	Yes	Yes
Dimensions and Power				
Height x Width x Length (inches)	1.73 × 17.24 × 22.83		1.73 × 17.20 × 24	
Height x Width x Length (mm)	44 × 438 × 580		44 × 437 × 610	
Weight	22.6 lbs (10.3 kg)		24.1 lbs (10.95 kg)	
Power Required	100–240V AC, 63-47 Hz, Redundant		100–240V AC, 50-60 Hz, Redundant	
Power Consumption (Average / Maximum)	300 W / 360 W			
Maximum Current	120V/5A, 240V/3A		100V/2.3A, 240V/0.94A	
Heat Dissipation	1160 BTU/h		767 BTU/h	
Redundant Power Supplies	Dual Power Supplies		Dual Power Supplies	
Environment				
Operating Temperature	32°–104°F (0°–40°C)			
Storage Temperature	-4°–158°F (-20°–70°C)			
Humidity	5%–95% non-condensing			
Operating Altitude	Up to 7400 ft. (2250 m)			
Compliance				
Regulatory Compliance	FCC Part 15 Class A, RCM, VCCI, CE, UL/c			
Safety	CSA, C/US, CE, UL			



SPECIFICATIONS

	FORTITESTER VM02	FORTITESTER VM04	FORTITESTER VM08	FORTITESTER VM16	FORTITESTER VM32
Virtual Machine					
Hypervisor Support	VMware ESX/ESXi, KVM, AWS, Azure, GCP, OCI, IBM, Alibaba				
vCPUs	2	4	8	16	32
Memory	6 GB	10 GB	18 GB	34 GB	44 GB
Storage	60 GB				
Network Interfaces	1 Management (E1000) + 4 Tester (PCI passthrough Intel(R) Ethernet Network Adapter x710)				
HTTP Throughput (Gbps)	9.9	12.0	15.0	18.0	20.0
HTTP Connections Per Second	383 000	677 000	1 280 000	1 660 000	2 170 000
HTTP Concurrent Sessions	300 000	800 000	4 000 000	9 000 000	18 000 000
SSL throughput (Gbps)	4.3	8.9	19.9	19.9	19.9
SSL Connections Per Second	1300	2600	4800	7400	9700
IPSEC	yes	yes	yes	yes	yes
SSLVPN	yes	yes	yes	yes	yes
Protocol TCP (CIFS, SMB, FIX, FTP, IMAP, LDAP, NFS, POP3, RDP, SMTP, SSH), UDP, DHCP, ICMP, RTSP/ RTP	yes	yes	yes	yes	yes
RFC2544 and 3511	yes	yes	yes	yes	yes
IPS, Malware, MITRE ATT&CK, FUZZING, and DDOS	yes	yes	yes	yes	yes
Replay — PCAP, Traffic, Attack, GTP	yes	yes	yes	yes	yes
Traffic Mix Enterprise / Lite / Fortinet Mix	no	Lite only	Lite/ Enterprise	Lite/ Enterprise/ Fortinet Emix	Lite/ Enterprise/ Fortinet Emix

FortiTester Test Center Mode Support

In order to run Test Center mode, FortiTester supports grouping similar members above in the same Test Center group.

TEST CENTER GROUP	MEMBERS
100	FTS-100F
2K	FTS-2000F, FTS-2500E
3K	FTS-3000F
VM	FTS_VM_KVM
VM ESXI	FTS_VM
AWS	FTS_VM_AWS
AWS_BYOL	FTS_VM_AWS_BYOL
AZR_BYOL	FTS_VM_AZURE_BYOL
OCI_BYOL	FTS_VM_OCI_BYOL
GCP_BYOL	FTS_VM_GCP_BYOL
IBM_BYOL	FTS_VM_IBM_BYOL



Ordering Information

PRODUCT	SKU	DESCRIPTION
HARDWARE		
FortiTester 100F	FTS-100F	Network Performance and Security Testing System for Enterprises and Service Providers – 1x GE MGMT port, 2x GE RJ45 ports, 2x GE SFP ports, 2x 10GE SFP+ ports. 1TB HDD Storage.
	FTS-100F-BDL-293-DD	Hardware plus Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection & MITRE ATT&CK signature updates), with 24x7 FortiCare support.
FortiTester 2000F	FTS-2000F	Network performance and security testing system for enterprises and service providers. - 1 x GE RJ45(mgmt), 4 x 10GE SFP+, 2 TB HDD Storage, SSL card for acceleration.
	FTS-2000F-BDL-293-DD	Hardware plus Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection & MITRE ATT&CK signature updates), with FortiCare Premium support.
FortiTester 2500E	FTS-2500E	Network Performance and Security Testing System for Enterprises and Service Providers – 1x GE RJ45, 4x 10 GE SFP+, 1 TB storage.
	FTS-2500E-BDL-293-DD	Hardware plus Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection & MITRE ATT&CK signature updates), with 24x7 FortiCare support.
FortiTester 3000F	FTS-3000F	Network performance and security testing system for enterprises and service providers. - 1 x GE RJ45(mgmt), 2 x 40GE QSFP (can split to 2 x 10GE SFP+), 2TB HDD Storage, equipped with SSL acceleration card.
	FTS-3000F-BDL-293-DD	Hardware plus Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection & MITRE ATT&CK signature updates), with FortiCare Premium support.
VM WARE		
FortiTester VM02	FTS-VM02	Network Performance and Security Testing System for Enterprises and Service Providers – Virtual appliance with 2x vCPU cores and 4 GB memory, supporting VMware/VMXNET3 and KVM/VIRTIO.
	FC-10-FTV02-294-02-DD	Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection & MITRE ATT&CK signature updates), with 24x7 FortiCare support.
FortiTester VM04	FTS-VM04	Network Performance and Security Testing System for Enterprises and Service Providers – Virtual appliance with 4x vCPU cores and 8 GB memory, supporting VMware/VMXNET3 and KVM/VIRTIO.
	FC-10-FTV04-294-02-DD	Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection & MITRE ATT&CK signature updates), with 24x7 FortiCare support.
FortiTester VM08	FTS-VM08	Network Performance and Security Testing System for Enterprises and Service Providers – Virtual appliance with 8x vCPU cores and 16 GB memory, supporting VMware/VMXNET3 and KVM/VIRTIO.
	FC-10-FTV08-294-02-DD	Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection & MITRE ATT&CK signature updates), with 24x7 FortiCare support.
FortiTester VM16	FTS-VM16	Network Performance and Security Testing System for Enterprises and Service Providers – Virtual appliance with 16x vCPU cores and 32 GB memory, supporting VMware/VMXNET3 and KVM/VIRTIO.
	FC-10-FTV16-294-02-DD	Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection & MITRE ATT&CK signature updates), with 24x7 FortiCare support.
FortiTester VM32	FTS-VM32	Network Performance and Security Testing System for Enterprises and Service Providers – Virtual appliance with 32x vCPU cores and 64 GB memory, supporting VMware/VMXNET3 and KVM/VIRTIO.
	FC-10-FTV32-294-02-DD	Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection & MITRE ATT&CK signature updates), with 24x7 FortiCare support.



Ordering Information

PRODUCT	SKU	DESCRIPTION
ACCESSORIES SUPPORT 100F/2000F/2500E		
1GE SFP RJ45 Transceiver Module (except FTS-100F)	FN-TRAN-GC	1GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+ slots.
1GE SFP LX Transceiver Module	FN-TRAN-LX	1GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.
1GE SFP SX Transceiver Module	FN-TRAN-SX	1GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.
10GE SFP+ Transceiver Module, Long Range	FN-TRAN-SFP+LR	10GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.
10GE SFP+ Transceiver Module, Short Range	FN-TRAN-SFP+SR	10GE SFP+ transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots.
10GE SFP+ Passive Direct Attach Cable	SP-CABLE-FS-SFP+1	10GE SFP+ Passive Direct Attach Cable, 1 m for Systems with SFP+ and SFP/SFP+ slots.
10GE SFP+ Passive Direct Attach Cable	SP-CABLE-FS-SFP+3	10GE SFP+ Passive Direct Attach Cable, 3 m for Systems with SFP+ and SFP/SFP+ slots.
10GE SFP+ Passive Direct Attach Cable	SP-CABLE-FS-SFP+5	10GE SFP+ Passive Direct Attach Cable, 5 m for Systems with SFP+ and SFP/SFP+ slots.
10GE SFP+ Passive Direct Attach Cable	SP-CABLE-FS-SFP+7	10GE SFP+ Passive Direct Attach Cable, 7 m for Systems with SFP+ and SFP/SFP+ slots.
10GE SFP+ Active Direct Attach Cable, 10m / 32.8 ft	SP-CABLE-ADASFP+	10GE SFP+ active direct attach cable, 10m / 32.8 ft for all systems with SFP+ and SFP/SFP+ slots.
ACCESSORIES SUPPORT 3000F		
40GE QSFP+ Transceiver Module, Short Range	FN-TRAN-QSFP+SR	40GE QSFP+ transceivers, short range for all systems with QSFP+ Slots.
40GE QSFP+ Passive Direct Attach Cable	SP-CABLE-FS-QSFP+1	40GE QSFP+ Passive Direct Attach Cable, 1 m for Systems with QSFP+ slots.
40GE QSFP+ Passive Direct Attach Cable	SP-CABLE-FS-QSFP+3	40GE QSFP+ Passive Direct Attach Cable, 3 m for Systems with QSFP+ slots.
40GE QSFP+ Passive Direct Attach Cable	SP-CABLE-FS-QSFP+5	40GE QSFP+ Passive Direct Attach Cable, 5 m for Systems with QSFP+ slots.
SECURITY SERVICES		
FortiTester XXXX	FC-10-XXXX-293-02-DD	Enterprise bundle (IPS attack PCAPs update, malware strike pack, web protection, and MITRE ATT&CK signature updates), with 24x7 FortiCare support.
	FC-10-XXXX-187-02-DD	FortiTester Premium Attack Signatures (FDS update of IPS attack PCAPs update, plus web protection signatures updates).
	FC-10-XXXX-318-02-DD	FortiTester ATT&CK MITRE Attack Package (Windows/ Linux/ Mac attacks based on MITRE techniques).
	FC-10-XXXX-261-02-DD	FortiTester Malware Strike Pack (FortiGuard auto update).

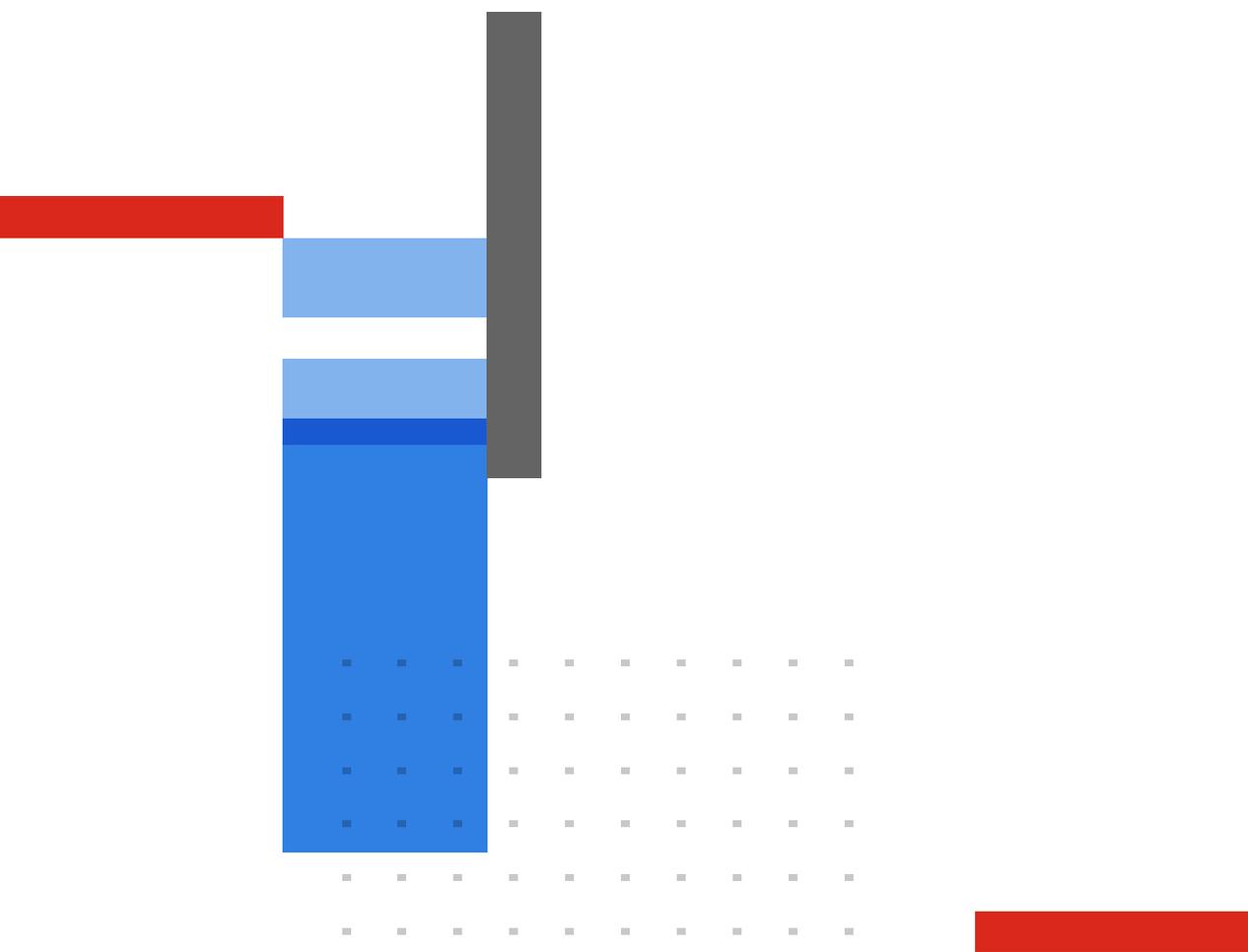
XXXX = hardware model such as FT01H, FTE2K, FT2KE, FTK3K

SERVICES SKU / UPDATES ENTITLEMENT	ENTERPRISE BUNDLE	PREMIUM ATTACK SIGNATURES	MALWARE STRIKE PACK	MITRE ATT&CK
IPS	☑	☑		
Web Attacks	☑	☑		
IOT / SCADA Attacks	☑	☑		
Malware Strike Pack	☑		☑	
MITRE ATT&CK	☑			☑



Fortinet Corporate Social Responsibility Policy

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