DATA SHEET

FortiSandbox™
Multi-layer proactive threat mitigation

# FortiSandbox

FortiSandbox 1000D, 3000D, FortiSandbox-VM and FortiSandbox Cloud

## Multi-layer proactive threat mitigation

Today's most sophisticated cybercriminals are increasingly bypassing traditional antimalware solutions and inserting advanced persistent threats deep within networks. These highly targeted attacks evade established signature-based detection by masking their malicious nature in many ways — compression, encryption, polymorphism, the list of techniques goes on. Some have even begun to evade virtual "sandbox" environments using VM detection, "time bombs" and more. Fighting today's attacks requires a comprehensive and integrated approach — more than antimalware. More than a virtual sandbox. More than a separate monitoring system.

FortiSandbox offers a robust combination of proactive detection and mitigation, actionable threat insight and easy, integrated deployment. At its foundation is a unique, dual-level sandbox which is complemented by Fortinet's award-winning antimalware and optional integrated FortiGuard threat intelligence. Years of Fortinet threat expertise is now packaged up and available on site via FortiSandbox.

### Proactive Detection and Mitigation

Suspicious codes are subjected to multi-layer pre-filters prior to execution in the virtual OS for detailed behavioral analysis. The highly effective pre-filters include a screen by our AV engine, queries to cloud-based threat databases and OS-independent simulation with a code emulator, followed by execution in the full virtual runtime environment. Once a malicious code is detected, results are submitted for antimalware signature creation as well as updates to other threat databases.

### Actionable Insight

All classifications — malicious and high/medium/low risk — are presented within an intuitive dashboard. Full threat information from the virtual execution — including system activity, exploit efforts, web traffic, subsequent downloads, communication attempts and more — is available in rich logs and reports.

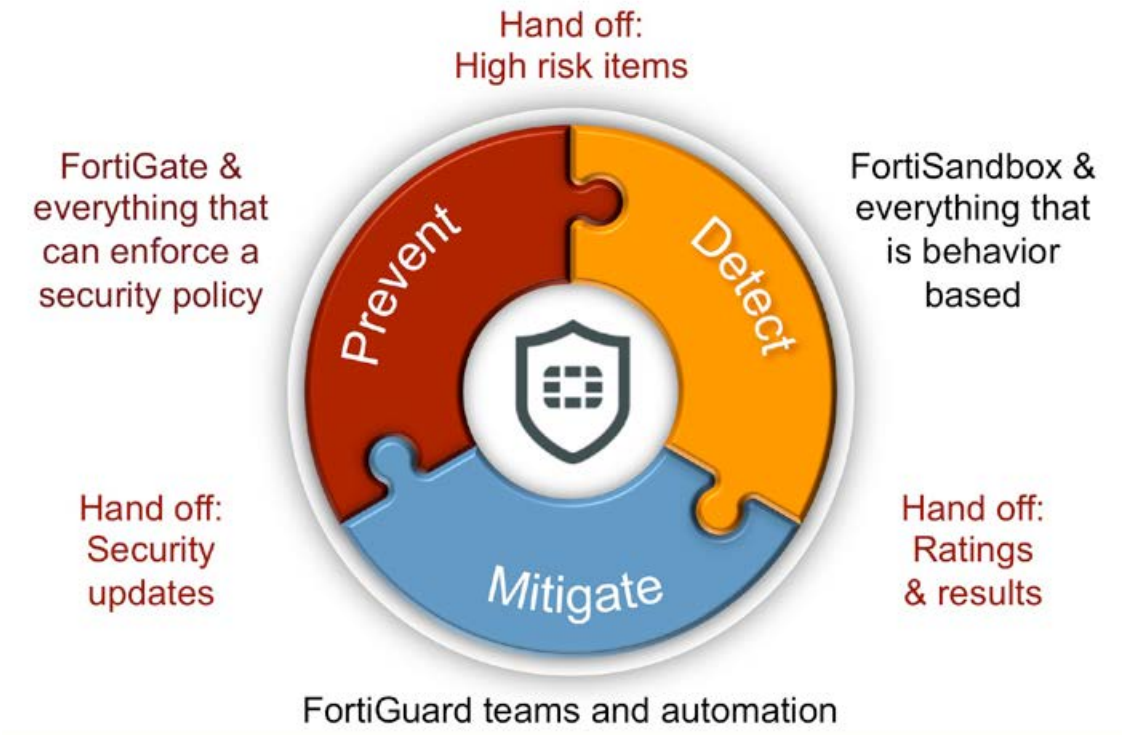
## The ultimate combination of proactive mitigation, advanced threat visibility and comprehensive reporting.

- Secure virtual runtime environment exposes unknown threats
- Unique multi-layer pre-filters for fast and effective threat detection
- Rich reporting for full threat lifecycle visibility
- Inspection of many protocols in one appliance simplifies deployment and reduces cost
- Integration with FortiGate enhances rather than duplicates security infrastructure
- Validated security with NSS BDS (Breach Detection Systems) testing

# ADVANCED THREAT PROTECTION FRAMEWORK

The most effective defense against advanced targeted attacks is founded on a cohesive and extensible protection framework. The Fortinet framework uses security intelligence across an integrated solution of traditional and advanced security tools for network, application and endpoint security, and threat detection to deliver actionable, continuously improving protection.

Fortinet integrates the intelligence of FortiGuard Labs into FortiGate next generation firewalls, FortiMail secure email gateways, FortClient endpoint security, FortiSandbox advanced threat detection, and other security products to continually optimize and improve the level of security delivered to organizations with a Fortinet solution.




## Prevent Attacks

Fortinet next generation firewalls, secure email gateways, endpoint security and similar solutions use security such as antivirus, web filtering, IPS, and other traditional security techniques to quickly and efficiently prevent known threats from impacting an organization.

## Detect and Analyze Threats

FortiSandbox and other advanced detection techniques step in to detect “Zero-day” threats and sophisticated attacks, delivering risk ratings and attack details necessary for remediation.

## Mitigate Impact and Improve Protection

In a Fortinet solution, detection findings can be used to trigger prevention actions to ensure the safety of resources and data until remediation is in place. Finally, the entire security ecosystem updates to mitigate any impact from future attacks through the strong, integrated threat intelligence research and services of FortiGuard Labs.

# DEPLOYMENT OPTIONS

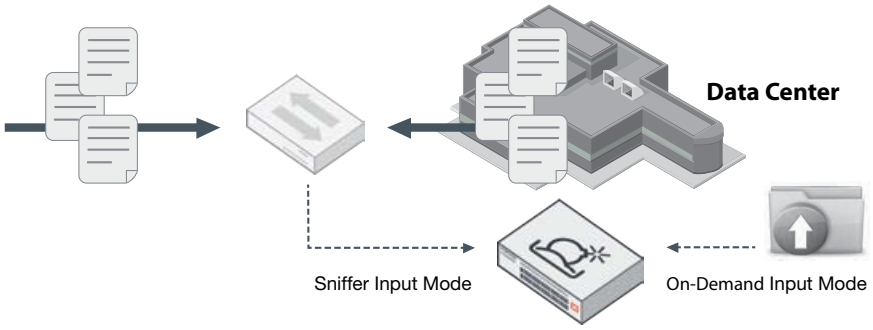
## Easy Deployment

FortiSandbox supports inspection of many protocols in one unified solution, thus simplifies network infrastructure and operations. Further, it integrates with FortiGate as a new capability within your existing security framework.

The FortiSandbox is the most flexible threat analysis appliance in the market as it offers various deployment options for customers' unique configurations and requirements. Organizations can also have all three input options at the same time.

## Standalone

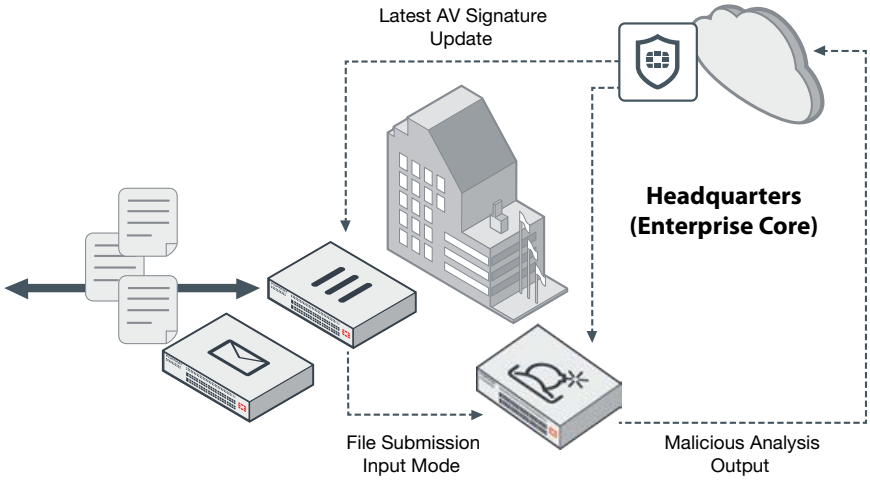
This deployment mode relies on inputs from spanned switch ports and/or administrators' on-demand file uploads using the GUI. It is the most suitable infrastructure for adding protection capabilities to existing threat protection systems from various vendors.




## *FortiGate/FortiMail Integrated

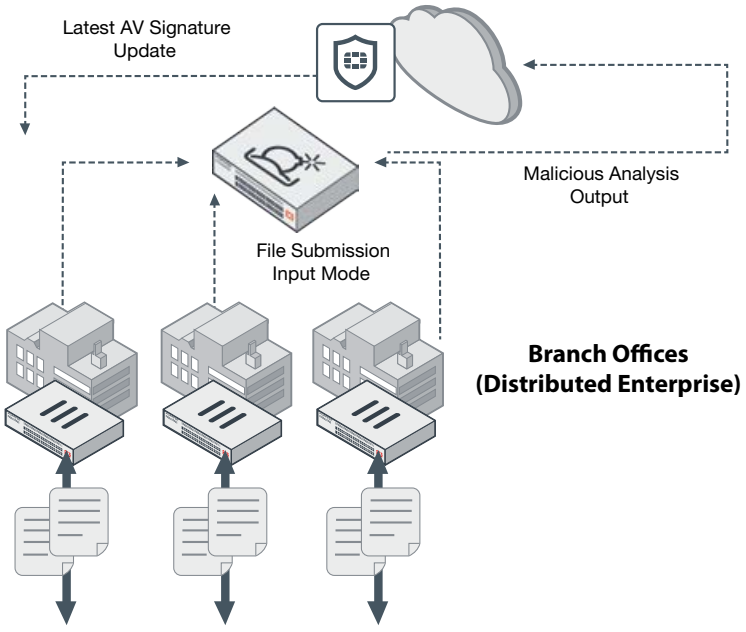
The FortiGate, as the Internet security gateway, can be set up to submit suspicious files to the FortiSandbox. This seamless integration reduces network complexity and expands the applications and protocols supported including SSL encrypted ones such as HTTPS.

* Requires: FortiOS V5.0.4+, FortiMail V5.1+

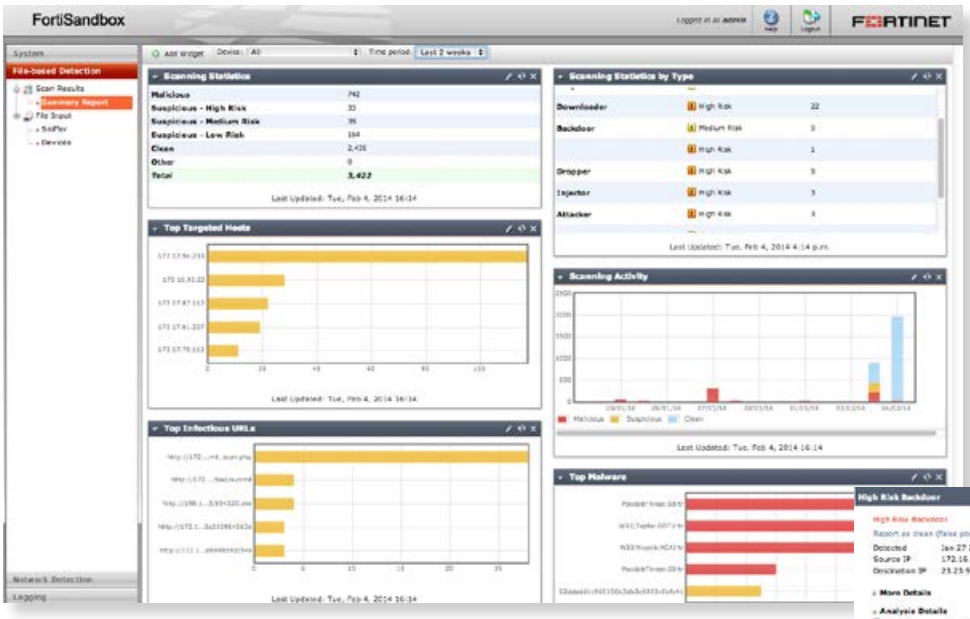



## Distributed FortiGate Integrated

This deployment is attractive for organizations that have distributed environments, where FortiGates are deployed in the branch offices and submit suspicious files to a centrally-located FortiSandbox. This setup yields the benefits of lowest TCO and protects against threats in remote locations.



# FEATURES



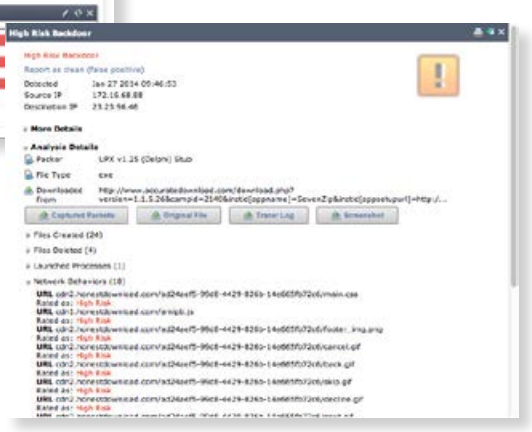

Dashboard widgets — real-time threat status

## VM Sandboxing

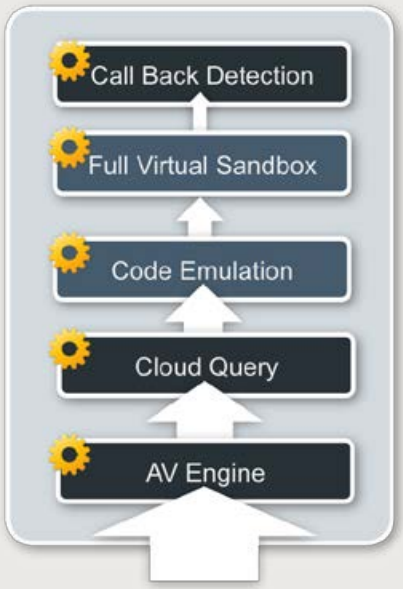
Complement your established defenses with cutting-edge capability — analyzing suspicious and high-risk files in a contained environment to uncover the full attack lifecycle using system activity and callback detection.

## File Analysis Tools

Reports with captured packets, original file, tracer log and screenshot provide rich threat intelligence and actionable insight after files are examined. This is to speed up remediation and updated protection.



Detailed file analysis report




## Multi-tiered file processing optimizes resource usage that improves security, capacity and performance

### AV engine

- Applies top-rated (95%+ Reactive and Proactive) AV Scanning. Serves as an efficient pre-filter.

### Cloud Query

- Real-time check of latest malware information
- Access to shared information for instant malware detection

### Code emulation

- Quickly simulates intended activity
- OS independent and immune to evasion/obfuscation

### Full Virtual sandbox

- Secure run-time environment for behavioral analysis/rating
- Exposes full threat lifecycle information

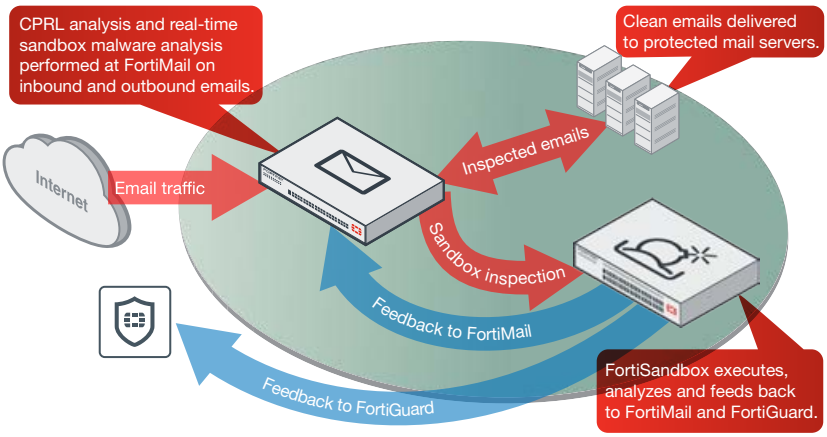
### Call Back Detection

- Identifies the ultimate aim, call back and exfiltration

# FEATURES

## Remediation with FortiMail

With many advanced threats starting with a targeted email that contains custom malware, in addition to social engineering that entices the user to open it, organizations are extending their secure email gateway (SEG) with integrated sandboxing. Specifically, the SEG will hold messages while additional analysis is performed in this contained run-time environment and, ultimately, apply policies based on its returned findings.




**FortiMail submits and queues for suspicious content**

# FEATURES SUMMARY

## Administration

- Supports WebUI and CLI configurations
- Multiple administrator account creation
- Configuration file backup and restore
- Notification email when malicious file is detected
- Weekly report to global email list and FortiGate administrators
- Centralized search page which allows administrators to build customized search conditions
- Frequent signature auto-updates
- Automatic check and download new VM images
- VM status monitoring

## Networking/Deployment

- Static Routing Support
- File Input: Offline/sniffer mode, On-demand file upload, file submission from integrated device(s)
- Web-based API with which users can upload samples to scan indirectly
- Option to create simulated network for scanned file to access in a closed network environment
- Device Integration:
  – File Submission input: FortiGate, FortiMail
  – Update Database host: FortiManager
  – Remote Logging: FortiAnalyzer, Syslog Server

## Advanced Threat Protection

- Virtual OS Sandbox:
  – Concurrent Windows instances
  – Anti-evasion techniques: sleep calls, process and registry queries
  – Callback Detection: malicious URL visit, Botnet C&C communication and Attacker traffic from activated malware
  – Download Capture packets, Original File, Tracer log and Screenshot
- Unlimited file size support, maximum file size configurable
- File type support:
  – Archived: .tar, .gz, .tar.gz, .tgz, .zip, .bz2, .tar.bz2, .bz, .tar.Z, .cab, .rar, .arj
  – Executable files: (eg: .exe, .dll), PDF, Windows Office Document, Javascript, AdobeFlash and JavaArchive (JAR) files
  – Media files: .avi, .mpeg, .mp3, .mp4

Protocols/applications supported:

  – Sniffer mode: HTTP, FTP, POP3, IMAP, SMTP, SMB
  – Integrated mode with FortiGate: HTTP, SMTP, POP3, IMAP, MAPI, FTP, IM and their equivalent SSL encrypted versions
  – Integrated mode with FortiMail: SMTP, POP3, IMAP

- Network Threat Detection in Sniffer Mode: Identify Botnet activties and network attacks, malicious URL visit
- Scan SMB/NSF network share and quarantine suspicious files. Scan can be scheduled
- Scan websites with URL links
- Option to auto-submit suspicious files to cloud service for manual analysis and signature creation
- Option to forward files to a network share for further third-party scanning

## Monitoring and Report

- Real-Time Monitoring Widgets (viewable by source and time period options): Scanning Result statistics, Scanning Activities (over time), Top Targeted Hosts, Top Malware, Top Infectious URLs, Top Callback Domains
- Drilldown Event Viewer: Dynamic table with content of actions, malware name, rating, type, source, destination, detection time and download path
- Logging — GUI, download RAW log file
- Report generation for malicious files: Detailed reports on file characteristics and behaviors – File Modification, Process Behaviors, Registry Behaviors, Network Behaviors, VM snapshot
- Further Analysis: Downloadable files — Sample file, Sandbox tracer logs and PCAP capture

# SPECIFICATIONS

| | FSA-1000D | FSA-3000D |
|---|---|---|
| **Hardware** | | |
| Form Factor | 2 RU | 2 RU |
| Total Network Interfaces | 6x GE RJ45 ports,<br>2x GE SFP slots | 4x GE RJ45 ports,<br>2x GE SFP slots<br>2x 10 GE SFP+ slots |
| Storage Capacity | 4 TB (max. 8 TB) | 8 TB (max. 16 TB) |
| Power Supplies | 2x Redundant PSU | 2x Redundant PSU |
| **System** | | |
| VM Sandboxing (Files/Hour) | 160 | 560 |
| AV Scanning (Files/Hour) | 6,000 | 15,000 |
| Number of VMs | 8 | 28 |
| **Integration and Operation Modes** | | |
| File Input Methods | Integrated with FortiGate and FortiMail, sniffer mode, manual on-demand file upload, submission API, network file share inspection | |
| FortiGate | All models (some require CLI configuration), FortiOS V5.0.4+ | |
| FortiMail | All models, FortiMail OS V5.1+ | |
| **Dimensions** | | |
| Height x Width x Length (inches) | 3.5 x 17.2 x 14.5 | 3.3 x 19.0 x 29.7 |
| Height x Width x Length (mm) | 89 x 437 x 368 | 84 x 482 x 755 |
| Weight | 27.60 lbs (12.52 kg) | 71.5 lbs (32.5 kg) |
| **Environment** | | |
| Power Consumption (Average / Maximum) | 15 / 138 W | 392 / 614.6 W |
| Maximum Current | 100V/5A, 240V/3A | 110V/10A, 220V/5A |
| Heat Dissipation | 471 BTU/h | 2131.14 BTU/h |
| Power Source | 100–240V AC, 60–50 Hz | 100–240V AC, 60–50 Hz |
| Humidity | 5–95% non-condensing | 20–90% non-condensing |
| Operation Temperature Range | 32–104°F (0–40°C) | 50–95°F (10–35°C) |
| Storage Temperature Range | -13–158°F (-25–70°C) | -40–149°F (-40–65°C) |
| **Compliance** | | |
| Certifications | FCC Part 15 Class A, C-Tick, VCCI, CE, BSMI, KC, UL/cUL, CB, GOST | |

| | FortiSandbox-VM |
|---|---|
| **Hardware Requirements** | |
| Hypervisor Support | VMware ESXi version 5.0 or later |
| Virtual CPUs (Minimum / Maximum) | 4 / Unlimited<br>(Fortinet recommends that the number of vCPUs match the number of Windows VM +4.) |
| Memory Support (Minimum / Maximum) | 8 GB / Unlimited |
| Virtual Storage (Minimum / Maximum) | 30 GB / 16 TB |
| Total Virtual Network Interfaces (Minimum) | 6 |
| **System** | |
| VM Sandboxing (Files/Hour) | Hardware dependent |
| AV Scanning (Files/Hour) | Hardware dependent |
| Number of VMs | 4 to 52 (Upgrade via appropriate licenses) |
| **Integration and Operation Modes** | |
| File Input Methods | Integrated with FortiGate and FortiMail, sniffer mode, manual on-demand file upload, submission API, network file share inspection |
| FortiGate | All models (some require CLI configuration), FortiOS V5.0.4+ |
| FortiMail | All models, FortiMail OS V5.1+ |

| | FortiSandbox Cloud |
|---|---|
| **System** | |
| VM Sandboxing (Files/Hour) | Unrestricted |
| AV Scanning (Files/Hour) | Unrestricted |
| Number of VMs | Not applicable |
| **Integration and Operation Modes** | |
| File Input Methods | Integrated with FortiGate |
| FortiGate | All models (some require CLI configuration), FortiOS V5.2.3+ |
| FortiMail | Not supported |

# ORDER INFORMATION

| Product | SKU | Description |
|---|---|---|
| FortiSandbox 1000D | FSA-1000D | Advanced Threat Protection System — 6x GE RJ45, 2x GE SFP slots, redundant PSU, 8 Windows licenses and 1 Microsoft Office license included. |
| FortiSandbox 3000D | FSA-3000D | Advanced Threat Protection System — 4x GE RJ45, 2x GE SFP slots, 2x 10 GE SFP+ slots, redundant PSU, 28 Windows licenses and 3 Microsoft Office licenses included. |
| FortiSandbox-VM | FSA-VM-BASE | Base license for stackable FortiSandbox-VM. 4 Windows licenses and 1 Microsoft Office license included. FSA-VM maximum expansion limited to 52 total VMs. |
| FortiSandbox Cloud Service | FC-10-00XXX-123-02-12 | FortiSandbox Cloud Service Subscription (SKU varied by FortiGate models). |
| **Optional Accessories** | | |
| 1 GE SFP SX Transceiver Module | FG-TRAN-SX | 1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots. |
| 1 GE SFP LX Transceiver Module | FG-TRAN-LX | 1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots. |
| 10 GE SFP+ Transceiver Module, Short Range | FG-TRAN-SFP+SR | 10 GE SFP+ transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots. |
| 10 GE SFP+ Transceiver Module, Long Range | FG-TRAN-SFP+LR | 10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots. |

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