



SecureSphere® Appliances

Scalable. Reliable. Flexible.

Imperva SecureSphere® appliances provide superior performance and resiliency for demanding datacenter environments. With fail open interfaces, SecureSphere platforms offer fast and cost-effective fail over. Out-of-band management enhances security, while front panel status messages and network interfaces improve manageability. SecureSphere appliances deliver a scalable, reliable and flexible platform to power Imperva's Web, database, and file security solutions.

High Performance Architecture

SecureSphere appliances offer ultra-high performance, allowing organizations to consolidate device management and address future bandwidth requirements. Supporting multi-gigabit throughput, tens of thousands of transactions per second, and sub-millisecond latency, SecureSphere appliances can manage heavy traffic loads without impacting application or network performance.

Fault Tolerant System Design

To maximize system uptime, the SecureSphere X2500, X4500, and X6500 models offer redundant, hot-swappable components including redundant power supplies, hard drives, and fans. In the event of a hardware failure, the redundant component will automatically take over, providing continuous system operations.

Expansion Options for Unique Business Needs

SecureSphere appliances can be extended to provide remote, out-of-band management and monitoring, performance acceleration, and more with expansion modules.

Options include:

- Lights-Out-Management (LOM)
- Hardware Security Module (HSM)
- SSL acceleration
- Fibre Channel interfaces

SecureSphere Virtual Appliances

SecureSphere Virtual Appliances deliver the complete SecureSphere product line in a software-only form factor. Expanding customers deployment options, SecureSphere Virtual Appliances provide a cost effective and flexible way to deploy SecureSphere's data security solutions and align with organizations' data center virtualization strategies.

SecureSphere for Amazon Web Services

SecureSphere WAF for AWS was designed to natively take advantage of Amazon Web Services infrastructure. Leveraging Amazon Cloud Formation, WAF instances are created and moved along with the applications they protect, including across Availability Zones, allowing for fast deployment of large enterprise-scale environments with minimal operational overhead. Instances of SecureSphere are created or removed from the deployment following Amazon's auto-scaling policies. These abstractions can dramatically improve the efficiency of IT and security operations teams.

SecureSphere Data Security Hardware Appliances



Specification		X6500	X4500	X2500
Fault Tolerance		Dual, hot-swap hard drives, power supplies, and fans	Dual, hot-swap hard drives, power supplies, and fans	Dual, hot-swap hard drives, power supplies, and fans
Throughput	(Web, Database and SharePoint security products) ¹	2 Gbps	1 Gbps	500 Mbps
	(File Activity Monitoring and File Firewall)	Not available	Up to 4 Gbps	Up to 2 Gbps
Latency		Sub-millisecond	Sub-millisecond	Sub-millisecond
Interface Module Slot 1	Default	4 x Copper	4 x Copper	4 x Copper
	Optional	2 x 1G Fiber SX OR 2 x 10G Fiber SR/LR	2 x 1G Fiber SX OR 2 x 10G Fiber SR/LR	2 x 1G Fiber SX OR 2 x 10G Fiber SR/LR
Interface Module Slot 2	Default	4 x Copper	None	None
	Optional	2 x 1G Fiber SX OR 2 x 10G Fiber SR/LR	4 x Copper OR 2 x 1G Fiber SX OR 2 x 10G Fiber SR/LR	4 x Copper OR 2 x 1G Fiber SX OR 2 x 10G Fiber SR/LR
Max Network Segments		(4) Bridge; (9) Proxy, Non-inline	(4) Bridge; (9) Proxy, Non-inline	(4) Bridge; (9) Proxy, Non-inline
Inline Fail Open (Bridging only)		Up to 4 bypass segments	Up to 4 bypass segments	Up to 4 bypass segments
Hard Drive		2 hot-swap 1 TB	2 hot-swap 1 TB	2 hot-swap 500 GB
Memory		8 GB	8 GB	4 GB
Serial Port		RJ45 connector	RJ45 connector	RJ45 connector
USB Port		2	2	2
SSL Acceleration		Included	Optional	Optional
Fibre Channel, LOM or HSM		Optional	Optional	Optional
Power Supply		Dual 400 W	Dual 400 W	Dual 400 W
AC Power		100-240V, 50-60 Hz	100-240V, 50-60 Hz	100-240V, 50-60 Hz
Typical Consumption		290 W	210 W	190 W
Typical Heat Output		990 BTU/Hr	720 BTU/Hr	650 BTU/Hr
Form Factor		2U	2U	2U
Dimensions		17.4 x 20.1 x 3.46 inches 443 x 512 x 88 mm	17.4 x 20.1 x 3.46 inches 443 x 512 x 88 mm	17.4 x 20.1 x 3.46 inches 443 x 512 x 88 mm
Weight		53.3 lbs (24.2 kg)	51.10 lbs (23.2 kg)	50.44 lbs (22.9 kg)
Operating Environment		Temperature: 5° - 40° C Relative Humidity: 20% - 90%	Temperature: 5° - 40° C Relative Humidity: 20% - 90%	Temperature: 5° - 40° C Relative Humidity: 20% - 90%
Storage Environment		Temperature: 0° - 70° C Relative Humidity: 20% - 90%	Temperature: 0° - 70° C Relative Humidity: 20% - 90%	Temperature: 0° - 70° C Relative Humidity: 20% - 90%
Safety Agency Approval		CE/FCC/cTUVus/VCCI/CCC/KCC	CE/FCC/cTUVus/VCCI/CCC/KCC	CE/FCC/cTUVus/VCCI/CCC/KCC
Supported SecureSphere Products		Web Application Firewall Database Activity Monitor Database Firewall SecureSphere for SharePoint	Web Application Firewall Database Activity Monitor Database Firewall File Activity Monitor File Firewall SecureSphere for SharePoint	Web Application Firewall Database Activity Monitor Database Firewall File Activity Monitor File Firewall Database Assessment SecureSphere for SharePoint
Database Agents Included²		100	50	25
Database Vulnerability Assessments Included³		400	200	100

¹ Throughput figures represent layer 7 Web application firewall and database security performance.

² Database agents only included with SecureSphere Database Activity Monitoring, Database Firewall and SecureSphere for SharePoint.

³ Database assessments only included with Discovery and Assessment Server, Database Activity Monitoring, and Database Firewall.

SecureSphere Data Security Hardware Appliances



Specification	X2010	X1010
Fault Tolerance	Not available	Not available
Throughput¹	500 Mbps	100 Mbps
Latency	Sub-millisecond	Sub-millisecond
Interfaces	4 x 1G Copper 2 x 1G Copper (for management)	4 x 1G Copper 2 x 1G Copper (for management)
Max Network Segments	(2) Bridge; (5) Proxy, Non-inline	(2) Bridge; (5) Proxy, Non-inline
Inline Fail Open (Bridging only)	2 bypass segments	2 bypass segments
Hard Drive	1 TB	1 TB
Memory	8 GB	8 GB
Serial Port	RJ45 connector	RJ45 connector
USB Port	2	2
SSL Acceleration	Optional	Optional
Power Supply	250 W	250 W
AC Power	100-240V, 50-60 Hz	100-240V, 50-60 Hz
Typical Consumption	110 W	110 W
Typical Heat Output	375 BTU/Hr	375 BTU/Hr
Form Factor	1U	1U
Dimensions	17.45 x 16 x 1.73 inches 443 x 406 x 44 mm	17.45 x 16 x 1.73 inches 443 x 406 x 44 mm
Weight	14.1 lbs (6.4 kg)	14.1 lbs (6.4 kg)
Operating Environment	Temperature: 5° - 40° C - Relative Humidity 20% - 90%	Temperature: 5° - 40° C Relative Humidity: 20% - 90%
Storage Environment	Temperature: 0° - 70° C Relative Humidity 20% - 90%	Temperature: 0° - 70° C Relative Humidity: 20% - 90%
Safety Agency Approval	CE/FCC/cTUVus/VCCI/CCC/KCC/CB	CE/FCC/cTUVus/VCCI/CCC/KCC/CB
Supported SecureSphere Products	Web Application Firewall Database Assessment	Web Application Firewall Database Assessment
Database Vulnerability Assessments Included²	100	25

¹ Throughput figures represent layer 7 Web application firewall performance

² Database vulnerability assessments only included with Database Assessment

SecureSphere Management Appliances

Imperva's SecureSphere management products deliver superior performance, scalability and unified management capabilities for any size deployment. Whether you're managing a small data center, or a large number of business units, data centers, or customers, SecureSphere products give you the visibility and control to minimize administrative overhead and ensure a strong data security posture.

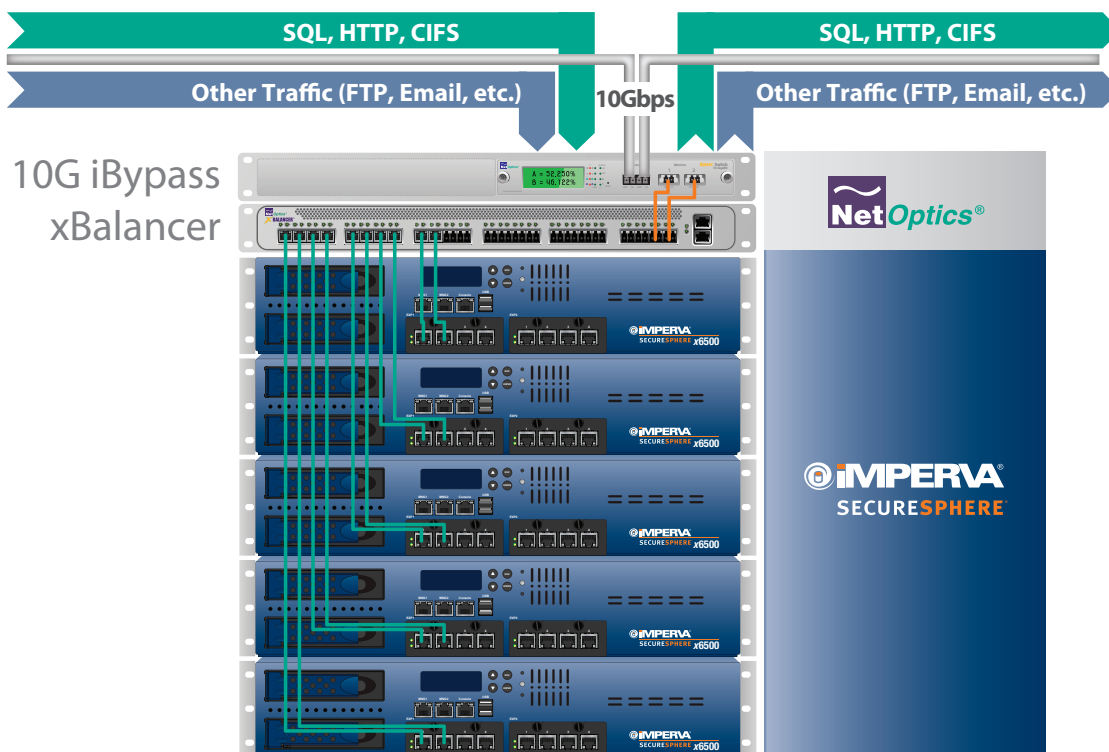
The Management Appliances support the SecureSphere Manager and SecureSphere Manager of Managers products.



Specification	M150	M110
Fault Tolerance	Dual, hot-swap hard drives, power supplies, and fans	Not available
Interface Module Slot 1	2 x 1Gb Copper	2 x 1Gb Copper
Memory	4 GB	8 GB
Hard Drive	2 hot-swap 500 GB	500 GB
Serial Port	RJ45 connector	RJ45 connector
USB Port	2	2
LOM or Fibre Channel	Optional	Not available
Power Supply	Dual 400 W	250 W
AC Power	100-240V, 50-60 Hz	100-240V, 50-60 Hz
Typical Consumption	190 W	110 W
Typical Heat Output	650 BTU/Hr	375 BTU/Hr
Form Factor	2U	1U
Dimensions	17.4 x 20.1 x 3.46 inches 443 x 512 x 88 mm	17.45 x 16 x 1.73 inches 443 x 406 x 44 mm
Weight	50 lbs (22.7 kg)	14.1 lbs (6.4 kg)
Operating Environment	Temperature: 5° - 40° C Relative Humidity 20% - 90%	Temperature: 5° - 40° C Relative Humidity 20% - 90%
Storage Environment	Temperature: 0° - 70° C Relative Humidity 20% - 90%	Temperature: 0° - 70° C Relative Humidity 20% - 90%
Safety Agency Approval	CE/FCC/cTUVus/VCCI/CCC/KCC	CE/FCC/cTUVus/VCCI/CCC/KCC
Supported SecureSphere Products	Manager Manager of Managers	Manager

SecureSphere Stack (powered by Net Optics)

The SecureSphere Stack, powered by Net Optics, provides a scalable, and high performance data security solution for bandwidth intensive applications. The SecureSphere Stack leverages Net Optics xBalancer to distribute 10 Gbps or more of inbound traffic across multiple SecureSphere X6500 gateways. Net Optics xBalancer forwards only relevant protocols to the SecureSphere gateways, ensuring SecureSphere is only inspecting Web, database, or file traffic. The SecureSphere Stack ensures organizations can easily scale SecureSphere Web, database, and file security deployments for high-bandwidth applications and cloud deployments.



Specification	Net Optics xBalancer	Net Optics 10 Gigabit iBypass Switch
Throughput	Up to 480Gbps aggregated throughput	Up to 10Gbps aggregated throughput
Interfaces	24 x SFP 1G/SFP+ 10 G Fiber or Copper 1 x 10/100/1000 RJ45 Copper for Management 1 x Cisco DB9 to RJ45 for CLI Configuration	2 x Duplex LC monitoring ports 2 x Duplex LC network ports
Fault Tolerance	Hot-swappable power supplies and fans	Redundant power supplies, fail open or close
Power	AC Input: 100-240VAC, 50/60 Hz DC Input: -40VDC nominal, 13.9 A	100-240VAC, 1 AMP, 47-63Hz
Form Factor	Surface or 19" rack mount (1U)	Rack mountable using a rack panel frame (2 slots)
Dimensions	19.7" deep x 19.0" wide x 1.75" high 500 x 483 x 44 mm	6.5" wide x 14" deep x 1.125" high 165.1 x 355.6 x 28.6 mm
Weight	13.5 lbs (6.12 kg)	2.85 lbs (1.29 kg)
Operating Environment	Temperature: 0° - 40° C Relative Humidity: 10% - 95%	Temperature: 0° - 40° C Relative Humidity: 10% - 95%
Storage Environment	Temperature: -10° - 70° C Relative Humidity: 10% - 95%	Temperature: -10° - 70° C Relative Humidity: 10% - 95%
Safety Agency Approval	MET, CE, FCC, VCCI, C-Tick, KC, ME06, CCC, AR, RoHS, and WEEE compliant	Fully RoHS compliant, UL 60950-1, CSA C22.2 No.60950-1, IEC 60950-1:2005 (2nd Edition), EN 60950-1:2006

Refer to Net Optics xBalancer and iBypass Switch Datasheets for more detailed specifications.

SecureSphere Virtual Appliances

SecureSphere Virtual Appliance provides the complete SecureSphere product line in a cost effective, simple, and easy to install virtual appliance. IT organizations can choose between physical or virtual SecureSphere deployments depending on their datacenter virtualization strategy.

With SecureSphere Virtual Appliances, customers can leverage existing hardware for appliance consolidation, maximize the utilization of their servers and network infrastructure and cut power, cooling and support costs. The simplicity and flexibility of SecureSphere Virtual Appliances enable organizations of any size to quickly provision new security services as requirements change.

Within a VMware ESX server environment, SecureSphere Virtual Appliances can inspect inter-VM traffic and support disaster recovery and workload migration requirements.

	V4500	V2500	V1000	VM150
Performance				
Throughput (Web, Database and SharePoint security products ¹)	Up to 1 Gbps	Up to 500 Mbps	Up to 100 Mbps	Not applicable
Throughput (File Activity Monitoring and File Firewall ²)	Up to 4 Gbps	Up to 2 Gbps	Not applicable	Not applicable
Supported SecureSphere Products	Web Application Firewall Database Activity Monitor Database Firewall File Activity Monitor File Firewall SecureSphere for SharePoint	Web Application Firewall Database Activity Monitor Database Firewall File Activity Monitor File Firewall SecureSphere for SharePoint	Web Application Firewall	Manager Manager of Managers
Minimum Requirements per physical host				
Hypervisor	VMware ESX/ESXi 3.5/4.0/5.0			VMware ESX/ESXi 3.5/4.0/5.0
Processor	Dual core server Intel VTx or AMD-V			Dual core server Intel VTx or AMD-V
Memory	2 GB			2 GB
Hard Drive	250 GB			250 GB
Network Interface	Hypervisor-supported network interface card			Hypervisor-supported network interface card
Minimum Requirements for each guest SecureSphere Virtual Appliance				
CPU	4	2	1	2
Memory	8 GB	4 GB	2 GB	4 GB
Disk Space	80 GB	80 GB	80 GB	80 GB

¹ SecureSphere for SharePoint not supported on V1000.

² File Security products: File Activity Monitor, File Firewall and SecureSphere for SharePoint.

* Actual performance dependent upon underlying hardware and virtual infrastructure

SecureSphere for AWS

SecureSphere for Amazon Web Services (AWS) protects applications in the Amazon cloud from web attacks with the industry’s leading WAF solution, SecureSphere Web Application Firewall, so you can avoid costly data breaches. SecureSphere for AWS is specifically designed to leverage native AWS infrastructure capabilities, such as AWS CloudFormation, so it not only delivers superior WAF capabilities but it uniquely addresses the security needs of AWS applications.

	AV1000	AV2500	AVM150
Performance			
Supported SecureSphere Products	Web Application Firewall	Web Application Firewall	MX Management Server
Throughput	Up to 100 Mbps	Up to 500 Mbps	Not Applicable
Minimum Requirements for Each SecureSphere for AWS Instance			
Minimum AWS Instance Type	M3 Large	M3 Extra Large	M3 Extra Large
SecureSphere for AWS Technical Details			
AWS Service Integration	EC2, CloudFormation, CloudWatch, VPC		
SecureSphere Operating System	CentOS version 6.3		
Delivery Method	64-bit Amazon Machine Image (AMI)		

Imperva SecureSphere Data Center Security

Imperva SecureSphere is a comprehensive, integrated security platform that includes SecureSphere Web, Database and File Security. It scales to meet the data center security demands of even the largest organizations and is backed by the Imperva Application Defense Center, a world-class security research organization that maintains the product's cutting-edge protection against evolving threats.

WEB APPLICATION SECURITY PRODUCTS

Web Application Firewall

Accurate, automated protection against online threats

ThreatRadar Reputation Services

Leverage reputation data to stop malicious users and automated attacks

ThreatRadar Community Defense

SecureSphere deployments around the world provide crowd-sourced threat intelligence to subscribers

ThreatRadar Fraud Prevention

Stop fraud malware and account takeover quickly and easily

Incapsula SaaS WAF and DDoS Protection

Best-of-breed web application security and content delivery as a service

DATABASE SECURITY PRODUCTS

Database Activity Monitor

Full auditing and visibility into database data usage

Database Firewall

Activity monitoring and real-time protection for critical databases

Database Assessment

Vulnerability assessment, configuration management, and data classification for databases

User Rights Management for Databases

Review and manage user access rights to sensitive databases

ADC Insights

Pre-packaged reports and rules for SAP, Oracle EBS, and PeopleSoft compliance and security

FILE SECURITY PRODUCTS

File Activity Monitor

Full auditing and visibility into file data usage

File Firewall

Activity monitoring and protection for critical file data

User Rights Management for Files

Review and manage user access rights to sensitive files

Directory Services Monitor

Audit, alert, and report on changes made in Microsoft Active Directory

SHAREPOINT SECURITY PRODUCTS

SecureSphere for SharePoint

Visibility and analysis of SharePoint access rights and data usage, and protection against Web based threats

