CHECK POINT 44000 AND 64000 SECURITY SYSTEMS

CHECK POINT SECURITY SYSTEMS

Scalable performance, advanced security

Product Benefits

- Scalable platform that grows with your business
- High port density with 10, 40 and 100 GbE fiber ports
- Full redundancy (N+N) eliminates down-time
- Advanced protection against known and unknown threats
- Designed for ease of management and fast deployment

Product Features

- Scalable security solution
- Raw firewall performance up to 377 Gbps in the 44000 and 880 Gbps in the 64000
- Real-world threat prevention performance up to 21 Gbps in the 44000 and 42 Gbps in the 64000
- High port density with up to 64x10GbE, 12x40GbE or 4x100GbE ports
- Intra/Dual-Chassis redundancy
- Carrier grade ATCA compliant chassis
- Full range of customizable protection capabilities from Firewall, IPS, to SandBlast Threat Emulation

INSIGHTS

Large data centers have uncompromising needs for performance, uptime and scalability. High end security gateway solutions must perform network access control within the unique requirements of these environments—ultra-high throughput, connection capacity, session and logging rate—while supporting the latest networking standards like IPv6. Additionally, with the increase in sophisticated attacks, security layers to protect against both known and unknown threats have become essential for organizations. In addition to their vast performance and security needs, data center environments are characterized by rigid requirements for high reliability of its various systems. All of these requirements drive the need for redundant, serviceable and highly available components and systems.

SOLUTION

The Check Point 44000 and 64000 Security Systems are built for these demanding environments and are based on proven technologies used by Fortune 100 companies and telecommunication vendors all over the world. The Check Point Firewall, IPS, Application Control and Identity Awareness technologies have been awarded the highest 3rd-party certifications possible including NATO Information Product Catalog; US Government penetration testing; Department of Defense Information Systems Agency, ISO-IEC 15408 and more.

The ATCA compliant, carrier grade design offers unsurpassed scalability, availability and serviceability with high performance and high port density. Redundant Security Switch Modules (SSM) provide switching fabric, physical interface, and routing functions. Redundant Chassis Management Modules (CMM) continuously check and monitor the health of the chassis including fans, power supplies and Security Gateway Modules (SGM). For optimal reliability, Check Point ClusterXL Load Sharing distributes the load between Security Gateway Modules in one chassis and ClusterXL High Availability operates between chassis. Check Point SyncXL provides for highly efficient synchronization of system and security information between components in order to ensure high system performance. Deploy two chassis in high availability mode to eliminate down-time.

These two platforms improve security, protect business continuity and reduce operational costs in complex, mission critical security environments such as data centers, Managed Service Providers and telecommunication companies. By adding more SGMs companies get more security and performance. Because SGMs are hot-swappable, customers can add SGMs, boosting performance to new or existing 44000 and 64000 systems even when those systems are in production.

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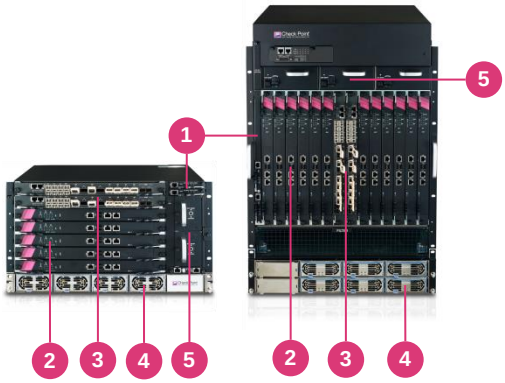
44000 and 64000

1. Chassis Management Modules (CMM)
2. Security Gateway Modules (SGM)
3. Security Switch Modules (SSM)
4. Power Supplies
5. Fan Trays



64000 SECURITY SYSTEM

The Check Point 64000 Security System is the industry's fastest security system, achieving up to 880 Gbps of throughput in a single firewall instance. Even more, the ability to support 228 million concurrent connections and 9 million sessions per second brings unparalleled performance to multi-transaction environments.

This ATCA compliant, scalable system contains up to 12 Security Gateway Modules (SGM) and 2 Security Switch Modules (SSM). The SSMs distribute the load evenly across the 1.2 Tbps chassis backplane fabric to the SGMs ensuring near linear scalability as SGMs are added to the chassis. The 64000 Security System delivers a SecurityPower range that scales up to 66,000 units with 12 SGMs and 2 SSMs.

The 64000 Security System has been designed from the ground up to support the unique service requirements of Telco's and data centers. This includes system level redundancy and chassis level redundancy of the components that comprise the 64000 such as power-supplies, fans and the various hardware modules.

44000 SECURITY SYSTEM

The Check Point 44000 Security System is a compact 6U ATCA compliant chassis that can contain up to 6 Security Gateway Modules (SGM) and up to 2 Security Switch Modules (SSM). The 44000 chassis distributes the load evenly among the SGMs ensuring near linear scalability up to 337 Gbps of firewall throughput as SGMs are added to the chassis.

The 44000 Security System delivers a SecurityPower range that scales to 33,000 SPUs with 6 SGMs. The shared design, components, and the flexibility to add additional security controls facilitates future expansion and growth of the network infrastructure, providing excellent investment protection.

VIRTUAL SYSTEMS

Check Point Virtual Systems (VS) enable organizations to create virtualized security gateways to consolidate infrastructure and segment the network while reducing costs and offering customized per-Virtual System Software Blade security. The solution supports seamless performance scale-up by adding more Virtual Systems and hardware blades, with traffic evenly balanced across the entire chassis.

	Gateway Mode	VS Mode
Firewall	✓	✓
IPsec VPN	✓	✓
Identity Awareness	✓	✓
IPS	✓	✓
Application Control	✓	✓
URL Filtering	✓	✓
Antivirus	✓	✓
Anti-Bot	✓	✓
SandBlast Threat Emulation	✓	✓
DLP	✓	×
Mobile Access	✓	×

✓ supported, × not supported

EASE OF MANAGEMENT

Our renowned security management software centrally manages the 44000 and 64000 from anywhere in the network. With our intuitive configuration wizard, the first SGM can be deployed in less than 30 minutes and additional SGMs can be added seamlessly.

INTEGRATED SECURITY ARCHITECTURE

Each 44000 and 64000 Security System is packaged with a group of preselected Check Point Software Blades including Firewall, IPsec VPN, Identity Awareness, Advanced Networking, and Acceleration and Clustering. Customize your protection by enabling additional Software Blades, such as SandBlast Threat Emulation which blocks zero-day attacks and unknown threats. This lowers total cost of ownership and meets any need, today and in the future.

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PERFORMANCE

	44000	64000
Ideal Testing Conditions		
Firewall Throughput, 1518 byte UDP (Gbps)	up to 377	up to 880
IPS Throughput (Gbps)	up to 126	up to 252
NGFW Throughput (Gbps)[1]	up to 64	up to 128
VPN Throughput AES-128 (Gbps)	up to 161.7	up to 323
Connections Per Second (M)	up to 4.5	up to 9
Concurrent Sessions (M)	up to 114	up to 228
Real-World Production Conditions		
SecurityPower	up to 33,000	up to 66,000
Firewall Throughput (Gbps)	up to 240	up to 539
IPS Throughput (Gbps)	up to 71	up to 142
NGFW Throughput (Gbps)[1]	up to 29.6	up to 59.2
Threat Prevention Throughput (Gbps)[2]	up to 21	up to 42
Security Gateway Modules		
SGM400 (Default/Max)	1/6	2/12
Virtual Systems		
Maximum	250	

Your performance may vary depending on different factors. Visit www.checkpoint.com/partnerlocator to find an appliance that matches your unique requirements. 1. Includes Firewall, Application Control and IPS Software Blades. 2. Includes Firewall, Application Control, URL Filtering, IPS, Antivirus, Anti-Bot and SandBlast Zero-Day Protection Software Blades.

HARDWARE

	44000	64000
Physical		
Enclosure	6U	16U
Dimensions Standard (WxDxH)	17.5 x 15 x 10.5 in.	17.7 X 15.2 x 26.43 in.
Dimensions Metric (WxDxH)	445 x 383 x 267 mm	449 x 385.6 x 696.7 mm
Weight (chassis without SGMs)	20 kg (44 lbs.)	57.4 kg (126.6 lbs.)
Weight (fully populated)	40 kg (88.2 lbs.)	99.8 kg (220.1 lbs.)
AC Power		
Power Supplies	4	4 (up to 9 SGMs), 6 (10-12 SGMs)
Input Voltage	85-240VAC	200-240VAC
Frequency	47-63 Hz	47-63Hz
Single Power Supply Rating	1200W @ 110V, 1584W @ 220V	2496W @ 208V/230V
DC Power		
Power Entry Modules (PEM)		2
Input		-48V to -60V, five feeds per module, 50 Amps per feed
Power Consumption		
Maximum	2500W	5600W
Thermal Output	8,530 BTU/hour	19,108 BTU/hour
Environmental Conditions		
Operating	23° to 122°F / –5° to 50°C, 5%-90% (non-condensing)	
Storage	–40° to 158°F / –40° to 70°C, 5%-95% (non-condensing)	
Certifications		
Safety	UL/EN/IEC60950-1 Certified with all country deviations	
Emissions	FCC part 15 Class A	
Environmental	RoHS, WEEE	

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NETWORK

Maximum Port Capacity (2 Security Switch Modules)	
100G QSFP28)	4
40G QSFP+	12
10GBase-F SFP+	64
Transceivers	
Network and Synchronization	QSFP28 transceiver for 100GbE ports (SR/MR/LR) QSFP transceiver for 40GbE ports (SR/LR) QSFP splitter for 40 GbE ports SFP+ (10GbE) fiber transceiver for SFP+ ports (SR/LR) SFP fiber transceiver for 1GbE SFP ports (SX/LX) Twisted pair transceiver for 1GbE SFP ports
Management and Log	SFP+ (10GbE) fiber transceiver for SFP+ ports (SR/LR) Fiber transceiver for 1GbE SFP ports (SX/LX) Twisted pair transceiver for 1GbE SFP ports (SX/LX)

The above are the maximum port capacities for a 2x SSM configuration. The SSM port configuration can be configured in multiple ways. Please refer to the latest 60000/40000 Administration Guide for an available port configuration that matches your environment.

ORDERING INFORMATION

Chassis	SKU
64000 Security System with AC power; includes chassis, 2xCMM, fans and 4 AC power supplies	CPAP-CHASSIS-64000
64000 Security System with DC power; includes chassis, 2xCMM, fans and 4 AC power supplies	CPAP-CHASSIS-64000-DC
44000 Security System with AC power; includes chassis, 2xCMM, fans, and 4 AC power supplies	CPAP-CHASSIS-44000

Security Gateway Modules	
Security Gateway Module SGM400 for 44000 and 64000	CPAP-SGM400

Security Switch Modules	
Switch Module SSM440 for 64000 Security Platform with up to 40 GbE	CPAP-SSM440
Security Switch Module SSM440 for 64000 Security Platform with up to 100 GbE	CPAP-SSM440-100G
100 GbE upgrade license for a single SSM440	CPSB-100G-SINGLE-UPG

Security Service Extension[1]	SKU
Next Generation SandBlast Zero-day Protection package for 1 year; includes Application Control, URL Filtering, IPS, Antivirus, Anti-Bot, Threat Emulation	CPSB-NGTX-64000-1Y
Next Generation Threat Prevention Package for 1 year; includes Application Control, URL Filtering, IPS, Antivirus, Anti-Bot	CPSB-NGTP-64000-1Y
Next Generation Firewall Package for 1 year; includes Application Control and IPS	CPSB-NGFW-64000-1Y
Next Generation SandBlast Zero-day Protection package for 1 year; includes Application Control, URL Filtering, IPS, Antivirus, Anti-Bot, Threat Emulation	CPSB-NGTX-44000-1Y
Next Generation Threat Prevention Package for 1 year; includes Application Control, URL Filtering, IPS, Antivirus, Anti-Bot	CPSB-NGTP-44000-1Y
Next Generation Firewall Package for 1 year; includes Application Control and IPS	CPSB-NGFW-44000-1Y

[1] Two and three year SKUS are also available. See the online Product Catalog

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Ordering (Continued)

Virtual Systems[1]	SKU
50 Virtual Systems package	CPSB-VS-50
50 Virtual Systems package for HA/VSLS	CPSB-VS-50-VSLS
25 Virtual Systems package	CPSB-VS-25
25 Virtual Systems package for HA/VSLS	CPSB-VS-25-VSLS
10 Virtual Systems package	CPSB-VS-10
10 Virtual Systems package for HA/VSLS	CPSB-VS-10-VSLS

[1] 44000 & 64000 scalable platforms include 10 Virtual Systems

Transceivers	SKU
QSFP28 transceiver for 100 GbE fiber ports - short range, up to 100m (100GBase-SR4) with MPO connector for SSM440	CPAC-TR-100SR-SSM440
QSFP28 transceiver for 100 GbE fiber ports - mid-reach, up to 2KM, for CWDM (100GBase-LR4) with LC connector for SSM440	CPAC-TR-100MR-SSM440
QSFP28 transceiver for 100 GbE fiber ports - mid-reach, up to 2KM, for LAN WDM (100GBase-LR4) with LC connector for SSM440	CPAC-TR-100MR-WDM-SSM440
QSFP28 transceiver for 100 GbE fiber ports - long-reach, up to 10KM, for LAN WDM (100GBase-LR4) with LC connector for SSM440	CPAC-TR-100LR-SSM440
SFP+ transceiver for 10G fiber ports - short range (10GBase-SR) for SSM440	CPAC-TR-10SR-SSM440
QSFP transceiver module for 40G fiber ports - long range (40GBase-LR4) for SSM440	CPAC-TR-40LR-SSM440
QSFP transceiver for 40G fiber ports - short range (40GBase-SR4) for SSM440	CPAC-TR-40SR-SSM440
SFP+ transceiver for 10G fiber ports - long range (10GBase-LR) for SSM440	CPAC-TR-10LR-SSM440
SFP transceiver for 1G fiber ports - short range (1000Base-SX) for SSM440	CPAC-TR-1SX-SSM440
SFP transceiver for 1G fiber ports - long range (1000Base-LX) for SSM440	CPAC-TR-1LX-SSM440
Twisted-pair cabling transceiver for 1G SFP ports (1000Base-T RJ45) for SSM440	CPAC-TR-1T-SSM440

Miscellaneous	
64000	**SKU**
Replacement AC power supply for 64000	CPAC-PSU-AC-60000
Replacement DC power supply for 64000	CPAC-PSU-DC-60000
Replacement fan for 64000	CPAC-SPARE-FAN-60000
Front lower cable management tray for 64000 chassis	CPAC-FLCMT
44000	**SKU**
Replacement AC power supply for 44000 Security System	CPAC-PSU-AC-44000
Replacement fan for 44000 Security System	CPAC-SPARE-FAN-44000

Chassis Management Module	SKU
Additional/replacement 64000 / 44000 Chassis Management Module (CMM)	CPAC-CMM400

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