

CHECK POINT 23500 NEXT GENERATION SECURITY GATEWAY FOR THE DATACENTER



CHECK POINT 23500 NEXT GENERATION SECURITY GATEWAY

Data center grade security, performance and reliability

Product Benefits

- High performance protection against the most advanced cyber attacks
- Unique “first time prevention” for the most sophisticated zero day attack
- Optimized for inspecting SSL encrypted traffic
- Future-proofed technology safeguards against tomorrow’s risks
- Centralized control and LOM improves serviceability
- Modular, expandable chassis with flexible I/O options

Product Features

- 4,900 SecurityPower™ Units
- Simple deployment and management
- Virtual Systems consolidates security onto one device
- High port density with 40 GbE option
- Redundant AC or DC power supplies, fans and disk drives eliminate single point of failure

OVERVIEW

The Check Point 23500 Next Generation Security Gateway combines the most comprehensive security protections with data center grade hardware to maximize uptime while safeguarding enterprise and data center networks. The 23500 is a 2U Next Generation Security Gateway with five I/O expansion slots for high port capacity, redundant AC or DC power supplies and fans, a 2x 1TB (HDD) or 2x 480GB (SSD) RAID1 disk array, and Lights-Out Management (LOM) for remote management. If you’re ready to move from 10 to 40 GbE, so is the 23500 Next Generation Security Gateway with the 40 GbE IO card option.

COMPREHENSIVE THREAT PREVENTION

The rapid growth of malware, growing attacker sophistication and the rise of new unknown zero-day threats require a different approach to keep enterprise networks and data secure. Check Point delivers fully integrated, comprehensive Threat Prevention with award-winning SandBlast™ Threat Emulation and Threat Extraction for complete protection against the most sophisticated zero-day threats.

Unlike traditional solutions that are subject to evasion techniques, introduce unacceptable delays, or let potential threats through while evaluating files, Check Point SandBlast stops more malware from entering your network. With our solution your employees can work safely no matter where they are and doesn’t compromise their productivity.

PERFORMANCE HIGHLIGHTS

Firewall	IPS	NGFW ¹	Threat Prevention ²
116 Gbps	22 Gbps	20 Gbps	7.2 Gbps

Performance measured under ideal testing conditions. Additional performance detailed on page 5.

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.

ALL-INCLUSIVE SECURITY SOLUTIONS

Check Point 23500 Next Generation Security Gateways offer a complete and consolidated security solution available in two complete packages:

- NGTP: prevent sophisticated cyber-threats with Application Control, URL Filtering, IPS, Antivirus, Anti-Bot and Email Security.
- NGTX: NGTP with SandBlast Zero-Day Protection, which includes Threat Emulation and Threat Extraction.

PREVENT KNOWN AND ZERO-DAY THREATS

The 23500 Next Generation Security Gateway protects organizations from both known and unknown threats with Antivirus, Anti-Bot, SandBlast Threat Emulation (sandboxing) and SandBlast Threat Extraction technologies.

As part of the Check Point SandBlast Zero-Day Protection solution, the cloud-based Threat Emulation engine detects malware at the exploit phase, even before hackers can apply evasion techniques attempting to bypass the sandbox. Files are quickly quarantined and inspected, running in a virtual sandbox to discover malicious behavior before it enters your network. This innovative solution combines cloud-based CPU-level inspection and OS-level sandboxing to prevent infection from the most dangerous exploits, and zero-day and targeted attacks.

Furthermore, SandBlast Threat Extraction removes exploitable content, including active content and embedded objects, reconstructs files to eliminate potential threats, and promptly delivers sanitized content to users to maintain business flow.

	NGTP	NGTX (SandBlast)
	Prevent known threats	Prevent known and zero-day attacks
Firewall	✓	✓
VPN (IPsec)	✓	✓
IPS	✓	✓
Application Control	✓	✓
URL Filtering	✓	✓
Anti-Bot	✓	✓
Anti-Virus	✓	✓
Anti-Spam	✓	✓
SandBlast Threat Emulation	✗	✓
SandBlast Threat Extraction	✗	✓

INCLUSIVE HIGH PERFORMANCE PACKAGE

Customers with high connection capacity requirements can purchase the affordable High Performance Package (HPP). This includes the base system plus two 4x 10Gb SFP+ interface cards, transceivers and 64 GB of memory for high connection capacity.

	Base	HPP	Max
1 GbE ports (Copper)	10	10	42
10 GbE ports (Fiber)	2	10	20
Transceivers (SR)	2	10	20
40 GbE ports (Fiber)	0	0	4
RAM	16GB	64GB	128GB
HDD or SSD	2	2	2
AC or DC Power Units	2	2	2
Lights Out Management	Included	Included	Included

A RELIABLE SERVICEABLE PLATFORM

The Check Point 23500 Next Generation Security Gateway delivers business continuity and serviceability through features such as hot swappable redundant AC or DC power supplies, hot-swappable redundant disk drives (RAID), redundant fans and an advanced LOM card for out-of-band management. Combined together, these features ensure a greater degree of business continuity and serviceability when these appliances are deployed in the customer's networks.

REMOTE MANAGEMENT AND MONITORING

A Lights-Out-Management (LOM) card provides out-of-band remote management to remotely diagnose, start, restart and manage the Next Generation Security Gateway from a remote location. Administrators can also use the LOM web interface to remotely install an OS image from an ISO file.

40 GBE CONNECTIVITY

High speed connections are essential in modern data center environments, especially those with high-density virtualized servers. If you're ready to move from 10 to 40 GbE, so is the 23500 Next Generation Security Gateway. The Check Point 23500 lets you connect your 10 GbE server uplinks to your 40 GbE core network with up to 4x 40 GbE ports.

TAP THE POWER OF VIRTUALIZATION

Check Point Virtual Systems enable organizations to consolidate infrastructure by creating multiple virtualized security gateways on a single hardware device, offering significant cost savings with seamless security and infrastructure consolidation.

23500 SECURITY GATEWAY

- 1 Graphic LCD display
- 2 2 x 1 TB (HDD) or 2x 480GB (SSD) RAID1
- 3 Five network card expansion slots
- 4 USB ports for ISO installation
- 5 Console port
- 6 Lights-Out Management port
- 7 Sync 10/100/1000Base-T RJ45
- 8 Management 10/100/1000Base-T RJ45



ORDERING INFORMATION

BASE CONFIGURATION ¹

23500 Next Generation Security Gateway Base Configuration, includes 10x1GbE copper ports, 2 10GbE SFP+ ports + 2 SR transceivers, 16GB RAM, 2 HDD, 2 AC Power Units, Lights Out Management (LOM), Next Generation Threat Prevention (NGTP) Security Subscription Package for 1 Year.	CPAP-SG23500-NGTP
23500 SandBlast Next Generation Security Gateway Base Configuration, includes 10x1GbE copper ports, 2 10GbE SFP+ ports + 2 SR transceivers, 16GB RAM, 2 HDD, 2 AC Power Units, Lights Out Management (LOM), SandBlast (NGTX) Security Subscription Package for 1 Year	CPAP-SG23500-NGTX

HIGH PERFORMANCE PACKAGES ¹

23500 Next Generation Security Gateway with High Performance Package, includes 10x1GbE copper ports, 10x10Gb SFP+ ports, 10 SR transceivers, 64 GB RAM, 2 HDD, 2 AC Power Units, Lights Out Management (LOM), Next Generation Threat Prevention (NGTP) Security Subscription Package for 1 Year	CPAP-SG23500-NGTP-HPP
23500 Next Generation Security Gateway with High Performance Package, includes 10x1GbE copper ports, 10x10Gb SFP+ ports, 10 SR transceivers, 64 GB RAM, 2 HDD, 2 AC Power Units, Lights Out Management (LOM), Next Generation Threat Extraction (SandBlast) Security Subscription Package for 1 Year	CPAP-SG23500-NGTX-HPP

VIRTUAL SYSTEM PACKAGES ¹

23500 Next Generation Security Gateway with High Performance Package, includes 10x1GbE copper ports, 10x10GbE SFP+ ports + 10 SR transceivers, 64GB RAM, 2 HDD, 2 AC Power Units, Lights Out Management (LOM), Next Generation Threat Prevention (NGTP) Security Subscription Package for 1 Year and 20 Virtual Systems	CPAP-SG23500-NGTP-HPP-VS20
Two 23500 Next Generation Security Gateways with High Performance Package, includes 10x1GbE copper ports, 10x10GbE SFP+ ports + 10 SR transceivers, 64GB RAM, 2 HDD, 2 AC Power Units, Lights Out Management (LOM), Next Generation Threat Prevention (NGTP) Security Subscription Package for 1 Year and 20 Virtual Systems	CPAP-SG23500-NGTP-HPP-VS20-2
23500 Next Generation Security Gateways with High Performance Package, includes 10x1GbE copper ports, 10x10GbE SFP+ ports + 10 SR transceivers, 64GB RAM, 2 HDD, 2 AC Power Units, Lights Out Management (LOM), Next Generation Threat Extraction (SandBlast) Security Subscription Package for 1 Year and 20 Virtual Systems	CPAP-SG23500-NGTX-HPP-VS20
Two 23500 Next Generation Security Gateways with High Performance Package, includes 10x1GbE copper ports, 10x10GbE SFP+ ports + 10 SR transceivers, 64GB RAM, 2 HDD, 2 AC Power Units, Lights Out Management (LOM), Next Generation Threat Extraction (SandBlast) Security Subscription Package for 1 Year and 20 Virtual Systems	CPAP-SG23500-NGTX-HPP-VS20-2

¹ SKUs for 2 and 3 years and appliances with an SSD option are also available, see the online Product Catalog

23500 SECURITY GATEWAY

- 1** Redundant AC or DC power supplies
- 2** Cooling fans



ACCESSORIES

INTERFACE CARDS AND TRANSCEIVERS

8 Port 10/100/1000 Base-T RJ45 interface card	CPAC-8-1C-B
4 Port 1000Base-F SFP interface card; requires additional 1000Base SFP transceivers	CPAC-4-1F-B
SFP transceiver module for 1G fiber ports - long range (1000Base-LX)	CPAC-TR-1LX-B
SFP transceiver module for 1G fiber ports - short range (1000Base-SX)	CPAC-TR-1SX-B
SFP transceiver to 1000 Base-T RJ45 (Copper)	CPAC-TR-1T-B
4 Port 10GBase-F SFP+ interface card	CPAC- 4-10F-B
SFP+ transceiver module for 10G fiber ports - long range (10GBase-LR)	CPAC-TR-10LR-B
SFP+ transceiver module for 10G fiber ports - short range (10GBase-SR)	CPAC-TR-10SR-B
2 Port 40GBase-F QSFP interface card	CPAC-2-40F-B
QSFP transceiver module for 40G fiber ports - short range (40GBase-SR)	CPAC-TR-40SR-QSFP-300m
QSFP transceiver module for 40G fiber ports - long range (40GBase-LR)	CPAC-TR-40LR-QSFP-10K
Bi-directional QSFP transceiver for 40G fiber Ports - short range (40GBase-SR-BD)	CPAC-TR-40SR-QSFP-BiDi
4 Port 1GE copper Bypass (Fail-Open) network interface card (10/100/1000 Base-T)	CPAC-4-1C-BP-B
2 Port 10GE short-range Fiber Bypass (Fail-Open) network interface card (10GBase-SR)	CPAC-2-10-FSR-B-BP

SPARES AND MISCELLANEOUS

Memory upgrade kit from 16GB to 64GB for 23500 appliance	CPAC-RAM48GB-23500
Memory upgrade kit from 16GB to 128GB for 23500 appliance	CPAC-RAM112GB-23500
Memory upgrade kit from 64GB to 128GB for 23500 appliance	CPAC-RAM64GB-23500
Additional/Replacement 1 TB hard drive for 15000 and 23000 Appliances	CPAC-HDD-1TB-B
Replacement AC power supply for 23000 Appliances	CPAC-PSU-AC-23000
Dual DC power supplies for 15000 and 23000 appliances	CPAC-PSU-DC-Dual-15000/23000
Replacement fan cartridge for 15000 and 23000 appliances	CPAC-FAN-B
Slide rails for 15000 and 23000 Appliances (22" - 32")	CPAC-RAIL-L
Extended slide rails for 15000 and 23000 Appliances (26" - 36")	CPAC-RAIL-EXT-L

Performance

Ideal Testing Conditions

- 116 Gbps of UDP 1518 byte packet firewall throughput
- 22 Gbps IPS
- 20 Gbps of NGFW¹
- 7.2 Gbps of Threat Prevention²
- 26 Gbps of AES-128 VPN throughput
- 200,000 connections per second, 64 byte response
- 6.4/25.6/51.2M concurrent connections, 64 byte response³

Real-World Production Conditions

- 4,900 SecurityPower Units
- 34 Gbps of firewall throughput
- 10 Gbps IPS
- 6.3 Gbps of NGFW¹
- 2.9 Gbps of Threat Prevention²

Virtual Systems

- Maximum VS (base/HPP/max memory): 60/125/125

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. 3. Performance measured with default/HPP/maximum memory.

Expansion Options

Base Configuration (using 2 of 5 expansion slots)

- 2 on-board 10/100/1000Base-T RJ-45 ports
- 8x 10/100/1000Base-T RJ-45 IO card
- 2x 10GBaseF SFP+ IO card
- 2x CPUs, 20x physical cores, 40x virtual cores (total)
- 16 GB memory (64 and 128 GB options)
- Redundant dual hot-swappable 1TB HDD or 480GB SSD
- Redundant dual hot-swappable power supplies (AC or DC)
- Lights-Out-Management (LOM)
- Slide rails (22" – 32")

Network Expansion Slot Options

- 8x 10/100/1000Base-T RJ45 port card, up to 40 ports
- 4x 1000Base-F SFP port card, up to 20 ports
- 4x 10GBase-F SFP+ port card, up to 20 ports
- 2x 40GBase-F QSFP port card, up to 4 ports

Fail-Open/Bypass Network Options

- 4x 10/100/1000Base-T RJ45 port card
- 2x 10GBase-F SFP+ port card

Network

Network Connectivity

- Total physical and virtual (VLAN) interfaces per appliance: 1024/4096 (single gateway/with virtual systems)
- 802.3ad passive and active link aggregation
- Layer 2 (transparent) and Layer 3 (routing) mode

High Availability

- Active/Active and Active/Passive - L3 mode
- Session failover for routing change, device and link failure
- ClusterXL or VRRP

IPv6

- NAT66, NAT64
- CoreXL, SecureXL, HA with VRRPv3

Unicast and Multicast Routing (see SK98226)

- OSPFv2 and v3, BGP, RIP
- Static routes, Multicast routes
- Policy-based routing
- PIM-SM, PIM-SSM, PIM-DM, IGMP v2, and v3

Physical

Power Requirements

- Single Power Supply rating: 800W
- AC power input: 90 to 264V (47-63Hz)
- DC input current: -40.5V/24A -48V/19.2A, -60V/16.0A
- Power consumption avg/max: AC225/383W, DC324.8/376W
- Maximum thermal output: 1306.9 BTU/hr.

Dimensions

- Enclosure: 2RU
- Dimensions (WxDxH): 17.4x20.8x3.5 in. (442x529x88 mm)
- Weight: 34.8 lbs. (15.8 kg)

Environmental Conditions

- Operating: 0° to 40°C, humidity 5% to 95%
- Storage: -40° to 70°C, humidity 5% to 95% at 60°C

Certifications

- Safety: UL, CB, CE, TUV GS
- Emissions: FCC, CE, VCCI, RCM/C-Tick
- Environmental: RoHS, REACH¹, ISO14001¹

¹ factory certificate