

16000 SECURITY GATEWAY



Ready to battle any threat, from small to the fifth generation large scale and multi-vector attacks, our security gateways provide superior threat prevention and a unified security management. Turbo charge your enterprise with Check Point 16000 Next Generation Firewalls that combine the most comprehensive protections with data center-grade security and hardware to maximize uptime and performance for securing large enterprise and data center environments.



Highest Security Effectiveness

Integrated with R80.30 and ThreatCloud setting a new standard of prevention against advanced 5th generation cyber attacks



State-of-the-Art SSL Inspection

Threat Prevention that delivers lightning fast SSL-encrypted traffic inspection without compromising up time or scalability



1 Tbps of Gen V Performance

Hyperscale ready, high performance threat prevention hardware for the fastest Gen V security gateway in the industry

PERFORMANCE HIGHLIGHTS

| | Gen II Security | Gen III Security | Gen V Security | |
|------------|-----------------|------------------|-------------------------------|--|
| | Firewall | NGFW + IPS | Threat Prevention + SandBlast | |
| Turbo | 78.3 Gbps | 27 Gbps | 16.4 Gbps | |
| Base, Plus | 58 Gbps | 20 Gbps | 12 Gbps | |

Performance measured with enterprise test conditions.



16000

Data center grade security, performance and reliability

The Check Point 16000 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 16000 is a 2U Next Generation Security Gateways with four 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 for 40 GbE, so is the 16000 Next Generation Security Gateway with its 40 GbE IO card options.

Key Features & Benefits

| Advanced Threat Prevention | 1 st time prevention of known and zero-day threats |
|----------------------------|--|
| Uncompromising Performance | Achieve up to 16.4 Gbps of threat prevention throughput |
| Secure Encrypted Traffic | Consolidate SSL inspection into one integrated security platform |



THE CYBER SECURITY ARCHITECTURE OF THE FUTURE

Data Center and High-End Enterprise Security Gateways

ONE SECURITY PLATFORM

Leveraging unified threat intelligence and open interfaces

REAL-TIME THREAT PREVENTION

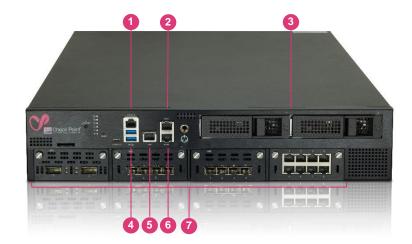
Blocking the most sophisticated attacks before they infiltrate the network

CONSOLIDATED MANAGEMENT

Single management, modular policy management and integrated threat visibility

16000 SECURITY GATEWAY

Console port
Sync 10/100/1000Base-T RJ45
2x 480GB SSD RAID1
USB ports for ISO installation
Lights-Out Management port
Management 10/100/1000Base-T RJ45
Four network card expansion slots



HIGH PERFORMANCE, NO COMPROMISE SECURITY

Prevent Known and Zero-day Threats Zero-day protection offering network security with evasion-resistant malware detection and complete protection from the most advanced attacks, ensuring quick delivery of safe content to users.



Complete Security: Simple Offering

Flexible cost-effective bundles. Subscription and support offered together for NGFW, NGTP or NGTX (sandboxing) in either direct or collaborative premium support for 1, 3 or 5 years.

High Performance Options

Purchase the affordable Plus or Turbo package and get a base system plus two 4x 10Gb interface cards, transceivers, 2x AC power supplies, 2x 480 GB SSD drives and 64 GB of memory for high connection capacity.



40 GbE Connectivity

If you're ready to move from to 40 GbE, so is the 16000 Next Generation Security Gateway. The 16000 Security Gateway lets you connect your 10 GbE server uplinks to your core network.

| | 1 GbE Copper | 1 GbE Fiber | 10 GbE | 40 GbE | Memory | Redundant Storage | Redundant Power | LOM |
|-------------------|-----------------|----------------|-----------|-----------|--------|----------------------|--------------------|-----|
| Base model | 10 | 0 | 0 | 0 | 32 GB | 0 | 0 | 0 |
| Plus, Turbo model | 10 | 0 | 8 | 0 | 64 GB | | | |
| Max capacity | 34 | 16 | 16 | 8 | 128 GB | | | |

O optional accessory



WELCOME TO THE FUTURE OF CYBER SECURITY SPECIFICATIONS

Performance

| Enterprise Test Conditions | | | | | |
|--|------------|---------|--|--|--|
| | Base, Plus | Turbo | | | |
| Threat Prevention ^{1 (} Gbps) | 12 | 16.4 | | | |
| NGFW ² (Gbps) | 20 | 27 | | | |
| IPS (Gbps) | 21 | 28.8 | | | |
| Firewall (Gbps) | 58 | 78.3 | | | |
| RFC 3511, 2544, 2647, 1242 PERFORMANCE (LAB) | | | | | |
| Firewall 1518B UDP (Gbps) | 118 | 159 | | | |
| VPN AES-128 (Gbps) | 17 | 20 | | | |
| Connections/sec | 375,000 | 435,000 | | | |
| Concurrent connections ³ | 8/16/32 | 16/32M | | | |
| | | | | | |

1. Includes Firewall, Application Control, URL Filtering, IPS, Antivirus, Anti-Bot and SandBlast Zero-Day Protection.

2. Includes Firewall, Application Control and IPS. 3. Performance measured with Base/Plus/maximum or Turbo/maximum memory.

Additional Features

Highlights

- 2x CPUs, 16 physical cores, 32 virtual cores (Base, Plus)
- 2x CPUs, 24 physical cores, 48 virtual cores (Turbo)
- 2x 1TB HDD or 480GB SSD RAID1 storage
- 2x AC power supplies
- 32, 64 GB, 128 GB memory options
- Lights-Out-Management card (optional in Base package)
- Virtual Systems (Base/Plus/max mem): 60/250/250

Network Expansion Slot Options (2 of 4 slots open)

- 1x 10/100/1000Base-T RJ45 port card, up to 34 ports
- 4x 1000Base-F SFP port card, up to 16 ports
- 4x 10GBase-F SFP+ port card, up to 16 ports
- 2x 40G QSFP+ port card, up to 8 ports

Content Security

First Time Prevention Capabilities

- CPU-level, OS-level and static file analysis
- File disarm and reconstruction via Threat Extraction
- Average emulation time for unknown files that require full sandbox evaluation is under 100 seconds
- Maximal file size for Emulation is 100 MB
- Emulation OS Support: Windows XP, 7, 8.1, 10

Applications

- Use 8,000+ pre-defined or customize your own applications
- Accept, prevent, schedule, and apply traffic-shaping

Data Loss Prevention

- Classify 700+ pre-defined data types
- End user and data owner incident handling

Content Security (continued)

Dynamic User-based Policy

- Integrates with Microsoft AD, LDAP, RADIUS, Cisco pxGrid, Terminal Servers and with 3rd parties via a Web API
- Enforce consistent policy for local and remote users on Windows, macOS, Linux, Android and Apple iOS platforms

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 L2, Active/Passive L2 and L3
- Session failover for routing change, device and link failure
- ClusterXL or VRRP

IPv6

- NAT66, NAT64, NAT46
- 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: 1300W
- AC power input: 90 to 240V (47-63Hz)
- Power consumption avg/max¹: AC261W/307W
- Maximum thermal output AC1: 1048 BTU/hr.
- ¹. base configuration, up to 800W/2730 BTU/hr. with max config

Dimensions

- Enclosure: 2RU
- Dimensions (WxDxH): 17.4 x 24 x 3.5 in. (442 x 610 x 88mm)
- Weight: 39.7 lbs. (18 kg)

Environmental Conditions

- Operating: 0° to 40°C, humidity 5% to 95%
- Storage: -20° 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, WEEE, REACH¹, ISO14001¹
- ¹. factory certificate



ORDERING 16000 SECURITY GATEWAYS

| SECURITY APPLIANCE ¹ | SKU |
|---|------------------------|
| 16000 Base configuration: 10x 1GbE copper ports, 32GB RAM, 1x 1TB HDD, 1x AC PSUs. The HDD option supports local/standalone management for 2 Gateways. | CPAP-SG16000 |
| 16000 Plus model configuration: 10x 1GbE copper ports, 8x 10GbE SFP+ ports, 8x SR transceivers, 64GB RAM, 2x 480GB SSD, 2x AC PSU, LOM, 5 Virtual Systems. | CPAP-SG16000-PLUS |
| 16000 Turbo model configuration: 10x 1GbE copper ports, 8x 10GbE SFP+ ports, 8x SR transceivers, 64GB RAM, 2x 480GB SSD, 2x AC PSU, LOM, 5 Virtual Systems. | CPAP-SG16000-TURBO |
| INTERFACE CARDS AND TRANSCEIVERS | |
| 8 Port 10/100/1000 Base-T RJ45 interface card | CPAC-8-1C-C |
| 4 Port 1000Base-F SFP interface card; requires additional 1000Base SFP transceivers | CPAC-4-1F-C |
| SFP transceiver module for 1G fiber ports - long range (1000Base-LX) | CPAC-TR-1LX-C |
| SFP transceiver module for 1G fiber ports - short range (1000Base-SX) | CPAC-TR-1SX-C |
| SFP transceiver to 1000 Base-T RJ45 (Copper) | CPAC-TR-1T-C |
| 4 Port 10GBase-F SFP+ interface card | CPAC-4-10F-C |
| SFP+ transceiver module for 10G fiber ports - long range (10GBase-LR) | CPAC-TR-10LR-C |
| SFP+ transceiver module for 10G fiber ports - short range (10GBase-SR) | CPAC-TR-10SR-C |
| 10G Direct Attach Copper (DAC) Cable, one meter (10BASE-CU) | CPAC-DAC-10G-1M |
| 10G Direct Attach Copper (DAC) Cable, three meters (10BASE-CU) | CPAC-DAC-10G-3M |
| 2 Port 40G QSFP+ interface card | CPAC-2-40F-C |
| 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-10Km |
| 40G Direct Attach Copper Cable, one meter (40BASE-CR4) | CPAC-DAC-40G-1M |
| 40G Direct Attach Copper Cable, three meters (40BASE-CR4) | CPAC-DAC-40G-3M |
| MEMORY | SKU |
| Memory upgrade kit from 32GB to 64GB for 16000 Security Gateways | CPAC-RAM32GB-16000 |
| Memory upgrade kit from 64GB to 128GB for 16000 Security Gateways | CPAC-RAM64GB-16000 |
| Memory upgrade kit from 32GB to 128GB for 16000 Security Gateways | CPAC-RAM96GB-16000 |
| SPARES AND MISCELLANEOUS | SKU |
| 480GB SSD for 16000/26000 Security Gateways | CPAC-SSD-480G-C |
| 1TB HDD for 16000/26000 Security Gateways | CPAC-HDD-1T-C |
| AC power supply for 16000 Security Gateways | CPAC-PSU-AC-16000 |
| Replacement Lights-Out Management Module | CPAC-LOM-C |
| Replacement Fan | CPAC-FAN-16000 |
| Slide rails for 16000 Security Gateways (22" - 32") | CPAC-RAIL-L |
| Extended slide rails for 16000 Security Gateways (24" - 36") | CPAC-RAIL-EXT-L |
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¹ 1, 3 and 5 year NGFW, NGTP and SandBlast (NGTX) packages with Direct Premium support are available in the online product catalog.