

# Quantum Force 9800

Security Gateway



#### YOU DESERVE THE BEST SECURITY



#### **Top Security Effectiveness**

Check Point #1 for the 2nd year in a row with 99.8% malware block rate in Miercom Next-Generation Firewall Security Benchmark (2024)

#### Named a Leader by Top Analyst Firms

Forrester Wave™ for Zero Trust Platform Providers, Q3 2023 Gartner® Firewall Magic Quadrant™ (2022)

#### AI/ML powered Threat Prevention

Protect networks and users from zero-days, phishing, DNS, and ransomware attacks

#### **Hyperscale Network Security**

On-demand expansion, load balancing firewall clustering, and resilient access to mission-critical applications

#### Unified Management and Ops Efficiency

Increase protection and reduce TCO with a consolidated security architecture

Quantum 9800 firewalls deliver up to 185 Gbps of firewall and 20 Gbps of threat prevention throughput with integrated AI/ML security, power efficiency and space savings in a modular 1 RU platform.

Increase the efficiency of your datacenter's security operations. Prevent even the most advanced attacks before they can infect their target. And manage your on-premises and cloud firewalls from a unified platform.







Network Resilience & Power Efficiency



Unified Security Management

# 9800 Performance Highlights

Firewall	Next Gen Firewall	Threat Prevention
185 Gbps	67.7 Gbps	20 Gbps



# Al-Powered advanced security and uncompromising performance, built for perimeter applications and data centers

Quantum Force 9800 data center firewalls deliver high threat prevention performance in a small 1 RU form factor to protect employees, networks, and data from cyber-theft. Two network I/O slots can be configured to fit your network with a high port density of up to 8x1/10G, 4x10/25G and 2x40/100G port capacity.

# Comprehensive and Industry-Leading Security

- Next Generation Firewall
- Site-to-Site and Remote Access VPN
- Application and Web Filtering
- Intrusion Prevention
- Antivirus and Anti-Bot
- Advanced DNS Security
- Sandboxing with file sanitization
- Zero-phishing (no agent required)

### Highest Performance Threat Prevention

With the 9800, organizations can inspect encrypted traffic and prevent even the most evasive attacks without impacting internal network performance. Achieve 20 Gbps of threat prevention throughput or up to 400 Gbps of UDP 1518B firewall throughput with a single 1RU firewall.



# Modular, High Port Density 1RU Chassis

The 9800 offers the flexibility to fit your changing network requirments. Populate two network I/O slots with your choice of network cards: 8x1/10G, 4x10/25G or 2x40/100G. In addition, the 40/100 card benefits for ASIC based firewall acceleration.

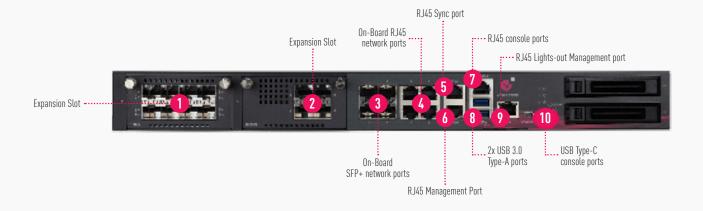
## Power Efficient, Resilient Design

With a low power consumption per Gbps of threat prevention throughput, these large enterprise firewalls cut power costs in half when compared with similar firewalls from other vendors.

# Flexible, High Performance HTTPS Inspection

While commonly used for good, HTTPS traffic can also hide illegal user activity and malicious traffic. Businesses need the ability to inspect a broad range of encrypted TLS 1.3 and HTTP/2 channels while also excluding inspection of sensitive regulated industry traffic, such as Health Care and Financial. Check Point makes it easy to fine-tune HTTPS security using customizeable dynamic security policies.







# **Specifications**

# Performance

#### Enterprise Test Conditions<sup>1</sup>

Threat Prevention <sup>2</sup> [Gbps]	20
NGFW <sup>3</sup> [Gbps]	67.7
IPS [Gbps]	90.5
Firewall [Gbps]	185

#### RFC 3511, 2544, 2647, 1242 Performance (Lab)

Firewall 1518B UDP [Gbps]	400
Firewall Latency (avg)	1.85µSec
VPN AES-GCM 1452B [Gbps]	75
Connections/sec	715,000
Concurrent connections (Base/Plus/Max)	7M/15M/29M

#### **TLS Inspection Performance**

Threat Prevention <sup>1,2</sup> [Gbps]	10.1
Threat Prevention <sup>2</sup> web mix <sup>4</sup> [Gbps]	6
IPS web mix <sup>4</sup> [Gbps]	7.9

# Additional Features

#### **Highlights**

- CPU: 20 physical cores, total of 40 logical cores
- Storage: BASE x 1 SSD 960GB NVMe, PLUS x 2 SSD 960GB NVMe
- Power: BASE x 1 External AC PSU, PLUS x 2 External AC PSUs
- 32 (64 in PLUS model) to 128 GB memory options
- Lights-Out-Management card optional (included in Plus package)

#### **Network Expansion Slot Options**

- 8 x 1/10GBASE-F SFP+ port card
- 4 x 10/25GBASE-F SFP28 port card
- 2 x 40/100GBASE-F QSFP28 port card

<sup>&</sup>lt;sup>1</sup> Enterprise traffic profile measured with maximum memory

<sup>&</sup>lt;sup>2</sup> Includes Firewall, App Control, URLF, IPS, Anti Malware and SandBlast (Incl. DNS Security & Zero Phishing) with logging enabled

<sup>&</sup>lt;sup>3</sup> Includes Firewall, App Control and IPS with logging enabled

<sup>&</sup>lt;sup>4</sup> Web traffic mix is based on RFC 9411 (NetSecOpen) web traffic profile



## Network

#### **Network Connectivity**

- 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

#### IPv<sub>6</sub>

- 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 AC: 450W
- Power input: 100 to 240VAC (47-63Hz), -40~-70VDC
- Power consumption avg/max: 233.5W/389.3W
- Maximum thermal output AC 1328.3BTU/h

#### **Dimensions**

- Enclosure: 1RU
- Dimensions: (WxDxH): 17.2 x 20 x 1.73 in.(438 x 508 x 44mm)
- Weight: (gross; Kg): 16.9

#### **Environmental Conditions**

- Operating: 0° to 40°C, humidity 5% to 950
- Storing: -20° to 70°C, humidity 5% to 95% at 60°C
- MTBF: > 10 years

#### Certifications

- Safety: CB IEC 62368-1, CE LVD EN62368-1, UL62368-1, ASNZS 62368.1
- Emissions: CE, FCC IC, VCCI, ASNZS ACMA
- Environmental: ROHS, REACH, WEEE, ISO14001

# Maximum Virtual System Capacity

	Firewall VS	Firewall + IPS VS	Next Gen Threat Prevention VS
Base model	106	60	20
Plus model	160	80	40
Max capacity	160	80	40
Maestro / MHS	160	80	40

# Ordering Quantum Force 9800 Security Gateway

The 9800 includes 1x RJ45 (1 GbE copper) management port plus an additional 1x RJ45 (1 GbE copper) port for synchronization when using the 9800 PLUS in a cluster. With the two network I/O slots, modify the base or plus configuration to meet your networking requirements. The 40/100G ports enable firewall traffic acceleration at line-rate

	On Board RJ45 <sup>1</sup>	1/10 GbE Fiber	10/25 GbE Fiber	40/100* GbE Fiber	Memory	Redundant Power	Redundant Storage	LOM
Base model	6	4	0	0	32 GB	0	0	0
Plus model	6	12	0	0	64 GB			
Max capacity	6	20	8	4	128 GB			
Maestro / MHS	6	4	4	0	64 GB			

<sup>1</sup>The RJ45 port count includes the Management & Sync ports





SECURITY APPLIANCE <sup>1</sup>	SKU
9800 Base configuration: 1x RJ45 (1GbE Copper) management port & 1x RJ45 (1GbE Copper) sync port, on-board 4x RJ45 network ports, on-board 4x RJ45 network ports, on-board 4x 1/10GbE SFP+ ports, 32 GB RAM, 1x 960 GB SSD NVMe, 1x AC PSUs, telescopic rails, SandBlast (SNBT) Security Subscription Package for 1 Year	CPAP-SG9800-SNBT
9800 Plus configuration: 1x RJ45 (1GbE Copper) management port & 1x RJ45 (1GbE Copper) sync port, on-board 4x RJ45 network ports, on-board 4 x 1/10GbE SFP+ ports, 8 x 1/10GbE SFP+ ports, 64 GB RAM, 2x 960 GB SSD NVMe, 2x AC PSUs, Lights-Out Management (LOM), 2x 25GbE DAC 3M, telescopic rails, SandBlast (SNBT) Security Subscription Package for 1 Year	CPAP-SG9800-PLUS-SNBT
Quantum Force 9800 Maestro / MHS HyperScale configuration: 1x RJ45 (1GbE Copper) management port & 1x RJ45 (1GbE Copper) sync port, on-board 4x RJ45 network ports, on-board 4 x 1/10GbE SFP+ ports, 4 x 10/25GbE SFP+ ports, 64 GB RAM, 2x 960 GB SSD NVMe, 2x AC PSUs, Lights-Out Management (LOM), 2x 25GbE DAC 3M, telescopic rails, SandBlast (SNBT) Security Subscription Package for 1 Year	CPAP-SG9800-PLUS-MHS-SNBT
Quantum Force 9800 Maestro / MHS HyperScale configuration with 1 MHO-140 orchestrator and 2 Quantum Force 9800 appliances, each appliance includes 1x RJ45 (1GbE Copper) management port & 1x RJ45 (1GbE Copper) sync port, on-board 4x RJ45 network ports, on-board 4x 1/10GbE SFP+ ports, 4x 10/25GbE SFP+ ports, 64 GB RAM, 2x 960 GB SSD NVMe, 2x AC PSUs, Lights-Out Management (LOM), 2x 25GbE DAC 3M, telescopic rails, SandBlast (SNBT) Security Subscription Package for 1 Year	CPAP-MHS-9802-PLUS-SNBT
Quantum Force 9800 Maestro / MHS HyperScale configuration with 1 MHO-140 orchestrator and 3 Quantum Force 9800 appliances, each appliance includes 1x RJ45 (1GbE Copper) management port & 1x RJ45 (1GbE Copper) sync port, on-board 4x RJ45 network ports, on-board 4x 1/10GbE SFP+ ports, 4x 10/25GbE SFP+ ports, 64 GB RAM, 2x 960 GB SSD NVMe, 2x AC PSUs, Lights-Out Management (LOM), 2x 25GbE DAC 3M, telescopic rails, SandBlast (SNBT) Security Subscription Package for 1 Year	CPAP-MHS-9803-PLUS-SNBT
Next Generation Threat Prevention & SandBlast package for 1 year for Quantum Force 9800 appliance	CPSB-SNBT-9800-1Y
Next Generation Threat Prevention package for 1 year for Quantum Force 9800 appliance	CPSB-NGTP-9800-1Y
Next Generation Firewall Package for 1 year for Quantum Force 9800 appliance	CPSB-NGFW-9800-1Y
Quantum IoT Network Protection for 1 year for Quantum Force 9800 appliances	CPSB-IOTP-9800-1Y
Quantum SD-WAN subscription for 1 year for Quantum Force 9800 appliances	CPSB-SDWAN-9800-1Y
Data Loss Prevention (DLP) blade for 1 year for Quantum Force 9800 appliances	CPSB-DLP-9800-1Y

<sup>&</sup>lt;sup>1</sup> The Base package includes 2 virtual systems (VS)—one management VS and one production/data VS which are not additive or counted when adding additional VS licenses.

# **ACCESSORIES**

INTERFACE CARDS	SKU
8 Port 1/10 G Base-F SFP+ interface card for 9000/19000/29000 appliances	CPAC-8-1/10F-D
4 Port 10/25G Base-F SFP28 interface card for 9000/19000/29000 appliances	CPAC-4-10/25F-D
2 Port 10/25/40/100G Base-F QSFP28 interface card for 9000/19000/29000 appliances	CPAC-2-40/100F-D

TRANSCEIVERS	SKU	
Compatible with the CPAC-8-1/10F-D and CPAC-4-10/25F-D, Interface Cards		
SFP transceiver module for 1000 BASE fiber ports - long range (1000BASE-LX), SM Fiber, LC	CPAC-TR-1LX-D	
SFP transceiver module for 1000 BASE fiber ports - short range (1000BASE-SX), MM Fiber, LC	CPAC-TR-1SX-D	



SFP transceiver to 1000 BASE-T RJ45 (Copper), CU, RJ45	CPAC-TR-1T-D
SFP+ transceiver module for 10GbE fiber ports - long range (10GBASE-LR), SM Fiber, LC	CPAC-TR-10LR-D
SFP+ transceiver module for 10GbE fiber ports - short range (10GBASE-SR), MM Fiber, LC	CPAC-TR-10SR-D
SFP+ transceiver module for 10GbE fiber ports - for links up to 40km (10GBASE-ER), SM Fiber, LC	CPAC-TR-10ER-D
SFP+ transceiver 10GBASE-T RJ45 (Copper) - for links up to 30m over CAT6a/CAT7, CU, RJ45	CPAC-TR-10T-D
Compatible with the CPAC-4-10/25F-D Interface Cards	
SFP28 transceiver module for 25GbE fiber ports - short range (25GBASE-SR), MM Fiber, LC	CPAC-TR-25SR-D
SFP28 transceiver module for 25GbE fiber ports - long range (25GBASE-LR), SM Fiber, LC	CPAC-TR-25LR-D
Compatible with the CPAC-2-40/100F-D Interface Card	
SFP+ transceiver module for 10GbE fiber ports - long range (10GBASE-LR), SM Fiber, LC with QSFP28 Adapter	CPAC-TR-10LR-D-ADP
SFP+ transceiver module for 10GbE fiber ports - short range (10GBASE-SR) MM Fiber, LC with QSFP28 Adapter	CPAC-TR-10SR-D-ADP
SFP+ transceiver module for 10GbE fiber ports - for links up to 40km (10GBASE-ER) SM Fiber, LC with QSFP28 Adapter	CPAC-TR-10ER-D-ADP
SFP+ transceiver 10GBASE-T RJ45 (Copper) - for links up to 30m over CAT6a/CAT7 with QSFP28 Adapter	CPAC-TR-10T-D-ADP
SFP28 transceiver module for 25GbE fiber ports - short range (25GBASE-SR) MM Fiber, LC with QSFP28 Adapter	CPAC-TR-25SR-D-ADP
SFP28 transceiver module for 25GbE fiber ports - long range (25GBASE-LR), SM Fiber, LC with QSFP28 Adapter	CPAC-TR-25LR-D-ADP
QSFP+ transceiver for 40GbE fiber Ports - short range (40GBASE-SR4) , MM Fiber, MPO-12	CPAC-TR-40SR-QSFP-100m-D
QSFP+ transceiver module for 40GbE fiber ports - short range (40GBASE-eSR4), MM Fiber, MPO-12	CPAC-TR-40SR-QSFP-300m-D
QSFP Bi-directional transceiver for 40GbE fiber ports - short range (40GBASE-SR-BD), MM Fiber, LC	CPAC-TR-40SR-QSFP-BiDi-D
QSFP+ transceiver module for 40GbE fiber ports for links up to 75m (40GBASE-SWDM4) MM Fiber, LC	CPAC-TR-40SWDM4
QSFP+ transceiver module for 40GbE fiber ports- for links up to 40km (40GBASE-ER4), SM Fiber, LC	CPAC-TR-40ER4
QSFP+ transceiver module for 40GbE fiber ports - long range (40GBASE-LR4), SM Fiber, LC	CPAC-TR-40LR-QSFP-10Km-D
QSFP28 transceiver module for 100GbE fiber ports - long range (100GBASE-LR4), SM Fiber, LC	CPAC-TR-100LR-D
QSFP28 transceiver module for 100GbE fiber ports - short range (100GBASE-SR4), MM Fiber, MPO-12	CPAC-TR-100SR-D
QSFP28 Bi-directional transceiver for 100GbE fiber Ports - short range (100GBase-SR1.2 BiDi), MM Fiber, LC	CPAC-TR-100SR-BiDi
QSFP28 transceiver module for 100GbE fiber ports - for links up to 75m (100GBASE-SWDM4),MM Fiber, LC	CPAC-TR-100SWDM4-D
QSFP28 transceiver module for 100GbE fiber ports - for links up to 2km (100GBASE-CWDM4), SM Fiber, LC	CPAC-TR-100CWDM4-D
QSFP28 transceiver module for 100GbE fiber ports, - for links up to 40km (100GBASE-ERL4), SM Fiber, LC	CPAC-TR-100ERL4

DIRECT ATTACH CABLES (DAC)	SKU
10GbE Direct Attach Cable (DAC), 3m length for CPAC-8-1/10F-D, CPAC-4-10/25F-D, and CPAC-2-40/100F-D	CPAC-DAC-10G-3M-D
25GbE Direct Attach Cable (DAC), 3m length for CPAC-4-10/25F-D, and CPAC-2-40/100F-D	CPAC-DAC-25G-3M-D
40GbE Direct Attach Cable (DAC), 3m length for CPAC-2-40/100F-D	CPAC-DAC-40G-3M-D
100GbE Direct Attach Cable (DAC), 3m length for CPAC-2-40/100F-D	CPAC-DAC-100G-3M-D

MEMORY	SKU
32GB Memory upgrade kit for 9700-9800 appliances	CPAC-RAM32GB-9700/9800
64GB Memory upgrade kit for 9700-9800 appliances	CPAC-RAM64GB-9700/9800
96GB Memory upgrade kit for 9700-9800 appliances	CPAC-RAM96GB-9700/9800



SPARES AND MISCELLANEOUS	SKU	
960GB SSD for 9000/19000/29000 security gateways	CPAC-SSD-960G-9000-D	
AC PSU for 9700-9800	CPAC-PSU-AC-9700/9800	
Lights-Out Management Module for 9000/19000/29000 appliances	CPAC-NLOM-D	
Slide rails for 9000 Security Gateways (22" - 32")	CPAC-Rails-9000	
Telescopic slide rails for 9000 Security Gateways (24" - 36")	CPAC-RAILS-EXT-9000	
Blank NIC cover for 9000/19000/29000 appliances	CPAC-NIC-COVER-D	

# SUBSCRIPTION SERVICES

	NGFW	NGTP	SNBT (SandBlast)
Application Control	<b>✓</b>	<b>&gt;</b>	<b>&gt;</b>
IPS	<b>✓</b>	<b>&gt;</b>	<b>&gt;</b>
URL Filtering		<b>✓</b>	<b>&gt;</b>
Anti-Bot		<b>✓</b>	<b>✓</b>
Anti-Virus		<b>✓</b>	<b>✓</b>
Anti-Spam		<b>✓</b>	<b>✓</b>
DNS Security		<b>✓</b>	<b>✓</b>
SandBlast Threat Emulation (sandboxing)			<b>✓</b>
SandBlast Threat Extraction (CDR)			<b>✓</b>
Zero Phishing			<b>✓</b>
IoT Network Protection	optional	optional	optional
SD-WAN Network Optimization	optional	optional	optional

The first-year purchase includes the SNBT package. Security subscription renewals, NGFW, NGTP and SNBT are available for subsequent years.

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