

**MAESTRO** **Quantum 7000 Hyperscale**  
Security Gateway for Maestro



Check Point Maestro brings scale, agility and elasticity of the cloud on premise with efficient N+1 clustering based on Check Point HyperSync technology, maximizing the capabilities of your existing security gateways.

Create your own virtualized private-cloud premise by stacking multiple Check Point security gateways together. Group them by security feature set, policy or the assets they protect and further virtualize them with virtual systems technology. With the Maestro Hyperscale Orchestrator and 7000 Hyperscale security gateways, businesses of all sizes can have cloud-level security on premise.



**Highest Security Effectiveness**

Integrated with R80 and ThreatCloud to set a new standard of prevention against advanced 5<sup>th</sup> 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



**475 Gbps of Gen V Performance**

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

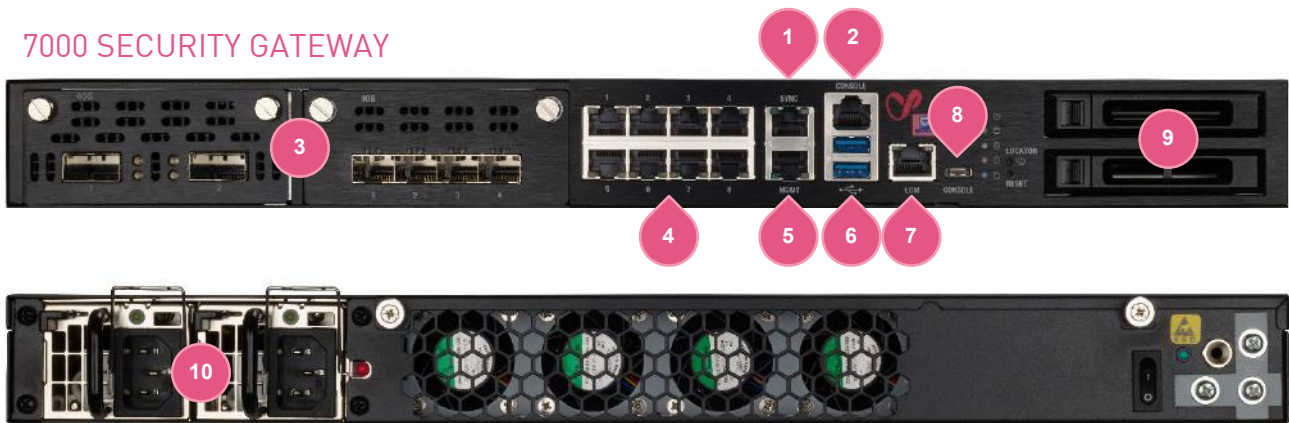
**PERFORMANCE HIGHLIGHTS**

Gen II Security Firewall	Gen III Security NGFW <sup>1</sup>	Gen V Security Threat Prevention + SandBlast <sup>2</sup>
48 Gbps	22 Gbps	9.5 Gbps

Performance measured with enterprise testing conditions. Additional performance details on page 3. 1: Includes Firewall, Application Control, and IPS. 2: Includes Firewall, Application Control, URL Filtering, IPS, Antivirus, Anti-Bot and SandBlast Zero-Day Protection

## HIGH PERFORMANCE, SCALABLE SECURITY

### 7000 SECURITY GATEWAY



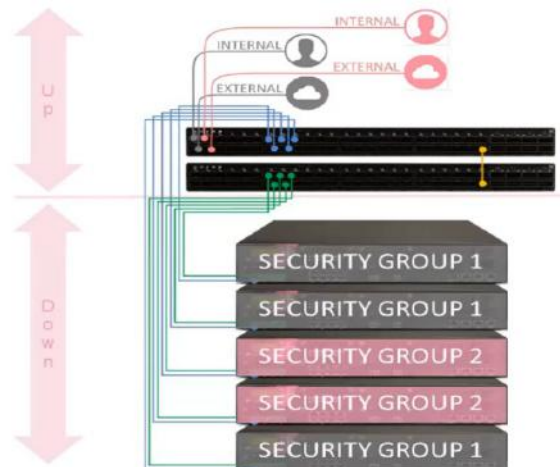
- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| 1. Sync 10/100/1000 Base-T port       | 6. 2x USB 3.0 ports                   |
| 2. RJ45 console port                  | 7. Lights-out Management port         |
| 3. 2x network card expansion slots    | 8. USB Type-C console port            |
| 4. 8x 10/100/1000 Base-T ports        | 9. 2x 480GB SSD RAID1                 |
| 5. Management 10/100/1000 Base-T port | 10. Redundant hot-swap power supplies |

### Hyperscale Security System

With Maestro, you can start with two gateways and then can grow to up to 52 gateways. For example, when you start with 19 Gbps using two 7000HS gateways you can finish with a 475 Gbps security solution. Simply by using Check Point Maestro.

### Hyperscale Orchestrator Connections

When a Security Group is created, an IP address is created for a Single Management Object connection to the security management server. Easily create and assign IP addresses to the internal and external network interfaces. These uplinks are the visible components of the Maestro security solution.



### Fully Operational within Minutes

When we add a gateway to the system, it gets all the configurations, the policy, even the software version, updated and aligned with the existing deployment, ready to go within 6 minutes.

### Maestro Traffic Distribution

HyperSync tracks the Active/Standby/Backup state of group members. Sync traffic is limited to only the Active and Standby members handling the connection.

### Cost-Efficient N+1 Deployments

Now businesses of all sizes can enjoy cloud-level resiliency and telco-grade technology using the efficient Maestro N+1 clustering design.

## SPECIFICATIONS

### Performance

#### Enterprise Test Conditions

Threat Prevention (Gbps) <sup>1</sup>	9.5
NGFW (Gbps) <sup>2</sup>	22
IPS (Gbps)	25
Firewall (Gbps)	48

#### RFC 3511, 2544, 2647, 1242 PERFORMANCE (LAB)

Firewall 1518B UDP (Gbps)	76.8
VPN AES-128 (Gbps)	11.9
Connections/sec	330,000
Concurrent connections	4/8/16M

1. Includes Firewall, Application Control, URL Filtering, IPS, Antivirus, Anti-Bot and SandBlast Zero-Day Protection with logging enabled. 2. Includes Firewall, Application Control and IPS with logging enabled.

### Additional Features

#### Highlights

- 4x 10 GbE SFP+ ports
- 1x CPUs, 16 physical cores, 32 virtual cores
- 2x 480 GB SSDs
- 2x AC power supplies
- 32 GB memory
- Virtual Systems (Plus/max mem): 20/20

### 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

#### Dynamic User-based Policy

- Integrates with Microsoft AD, LDAP, RADIUS, Cisco pxGrid, Terminal Servers and with 3<sup>rd</sup> 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

#### IPv6

- NAT66
- CoreXL, SecureXL

#### Unicast and Multicast Routing (see SK98226)

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

### Maestro

#### Maximums

- Up to 8 Security Groups
- Up to 31 gateways in a Security Group
- Up to 24 gateways in a Security Group (dual site deployment, 14 from each site)
- 48x 10 GbE and 8x 100 GbE ports (MHO 140)

### Physical

#### Power Requirements

- Single Power Supply rating: 500W
- AC power input: 100 to 240V (47-63Hz)
- Power consumption avg/max: 144W/270W
- Maximum thermal output: 921 BTU/hr.

#### Dimensions

- Enclosure: 1RU
- Dimensions (WxDxH): 17.2 x 20 x 1.73 in. (438 x 508 x 44mm)
- Weight: 19.8 lbs. (9 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, REACH<sup>1</sup>, ISO14001<sup>1</sup> factory certificate

## ORDERING QUANTUM 7000HS MAESTRO SOLUTIONS

MAESTRO HYPERSCALE SOLUTION PACKAGES	SKU
Maestro Solution with two 7000 firewalls with SandBlast subscription package for 1 year and one Orchestrator (MHO-140). Each appliance includes 32 GB RAM, 10x 1GbE copper on-board, 4x 10GbE fiber, 2x AC PSU, 2x 480GB SSD, LOM, telescopic rails, plus 2x 10G DAC cables (1m, 3m). MHO-140 includes 1x 10G DAC (3m).	CPAP-MHS-7002-PLUS-SNBT
Maestro Solution with three 7000 firewalls with SandBlast subscription package for 1 year and one Orchestrator (MHO-140). Each appliance includes 32 GB RAM, 10x 1GbE copper on-board, 4x 10GbE fiber, 2x AC PSU, 2x 480GB SSD, LOM, telescopic rails, plus 2x 10G DAC cables (1m, 3m). MHO-140 includes 1x 10G DAC (3m).	CPAP-MHS-7003-PLUS-SNBT

SECURITY GATEWAY APPLIANCES FOR SCALE-UP	SKU
7000 security gateway for Maestro including 32 GB RAM, 10x 1GbE copper on-board, 4x 10GbE fiber, 2x AC PSU, 2x 480GB SSD, LOM, plus 2x 10G DAC cables (1m, 3m) with SandBlast subscription package for 1 year.	CPAP-SG7000-PLUS-MHS-SNBT

SECURITY GATEWAY ACCESSORIES	SKU
Direct Attach Copper (DAC) cables 10GbE SFP+ to SFP+, 1M	CPAC-DAC-10G-1M
Direct Attach Copper (DAC) cables 10GbE SFP+ to SFP+, 3M	CPAC-DAC-10G-3M
Memory upgrade kit from 32GB to 64GB for 7000 appliance	CPAC-RAM32GB-7000
Replacement AC power supply for 7000 Security Gateways	CPAC-PSU-AC-7000
Lights-Out Management Module	CPAC-LOM-C
Extended slide rails for 7000 Security Gateways (24" - 36")	CPAC-RAILS-EXT-6000/7000

MAESTRO HYPERSCALE ORCHESTRATOR	SKU
Maestro Hyperscale Orchestrator 140 with 8x 100 GbE and 48x 10 GbE ports, plus 1x 10G DAC (3m).	CPAP-MHO-140

MAESTRO HYPERSCALE ORCHESTRATOR ACCESSORIES	SKU
Fan replacement for Maestro Hyperscale Orchestrator 140	CPAC-FAN-MHO140
AC power supply unit replacement for Maestro Hyperscale Orchestrator 140 and 170	CPAC-PSU-AC-MHO140/170
Rail kit for Maestro Hyperscale Orchestrators 140 and 170	CPAC-RAIL-MHO140/170

MHO-140 TRANSCEIVERS	SKU
100G CWDM4, LC connector, 2Km/ single mode fiber	CPAC-TR-100CWDM4
100G SWDM4, LC connector, 75m/OM3 fiber	CPAC-TR-100SWDM4
QSFP28 transceiver module for 100G fiber ports - short range (100GBase-SR4)	CPAC-TR-100SR
QSFP28 transceiver module for 100G fiber ports - long range (100GBase-LR4)	CPAC-TR-100LR
QSFP+ transceiver module for 40G fiber ports - short range (40GBase-SR) CPAC-TR-40SR-QSFP-300m	CPAC-TR-40SR-QSFP-300m
QSFP+ transceiver module for 40G fiber ports - long range (40GBase-LR) CPAC-TR-40LR-QSFP-10Km	CPAC-TR-40LR-QSFP-10Km
Bi-directional QSFP transceiver for 40G fiber Ports - short range (40GBase-SR-BD) CPAC-TR-40SR-QSFP-BiDi	CPAC-TR-40SR-QSFP-BIDI
QSFP+ splitter for 40G fiber ports for Maestro (MHO140 and MHO170) - 3 meters	CPAC-TR-40SPLIT-QSFP-3M
QSFP+ splitter for 40G fiber ports for Maestro (MHO140 and MHO170) - 6 meters	CPAC-TR-40SPLIT-QSFP-6M
SFP+ transceiver module for 10G fiber ports - short range (10GBase-SR)	CPAC-TR-10SR-C
SFP+ transceiver module for 10G fiber ports - long range (10GBase-LR)	CPAC-TR-10LR-C
SFP+ transceiver 10GBASE-T RJ45 (Copper) - for links up to 30m over CAT6a/CAT7	CPAC-TR-10T-C
SFP transceiver module for 1G fiber ports - short range (1000Base-SX)	CPAC-TR-1SX-C
SFP transceiver module for 1G fiber ports - long range (1000Base-LX)	CPAC-TR-1LX-C
SFP transceiver to 1000 Base-T RJ45 (Copper)	CPAC-TR-1T-C

## ORDERING MAESTRO SOLUTIONS (Continued)

### All-inclusive Security

	NGFW	NGTP	SNBT (SandBlast)
	Basic access control with IPS	Prevent known threats	Prevent known and zero- day attacks
Firewall	✓	✓	✓
VPN (IPsec)	✓	✓	✓
Application Control	✓	✓	✓
Content Awareness	✓	✓	✓
IPS	✓	✓	✓
URL Filtering		✓	✓
Anti-Bot		✓	✓
Anti-Virus		✓	✓
Anti-Spam		✓	✓
SandBlast Threat Emulation			✓
SandBlast Threat Extraction			✓

Each gateway requires a license for the enabled security feature. The first year purchase includes the SNBT package. Security subscription extensions, NGFW, NGTP and SNBT are available for subsequent years.