

# QUANTUM 16600 HYPERSCALE SECURITY GATEWAY



## Quantum Security Gateway™ Advantage

Uncompromising Security

Security at Hyperscale

Unified Security

**Check Point Quantum 16600 Hyperscale Next Generation Firewalls** enables enterprises to deploy the industry’s leading threat prevention capabilities at all points of their infrastructure, scaling security almost infinitely according to their changing business needs. It also dramatically accelerates the efficiency of their security operations. This enables enterprises to prevent and block even the most advanced attacks, before they can disrupt business.



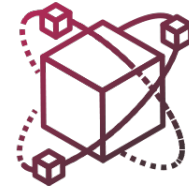
### Always Protected against Gen V Attacks

Highest caliber prevention  
with unified security



### Security at Hyperscale

On-demand expansion  
with hyperscalability



### Efficient Operations

Cut operation management  
time by up to 80%

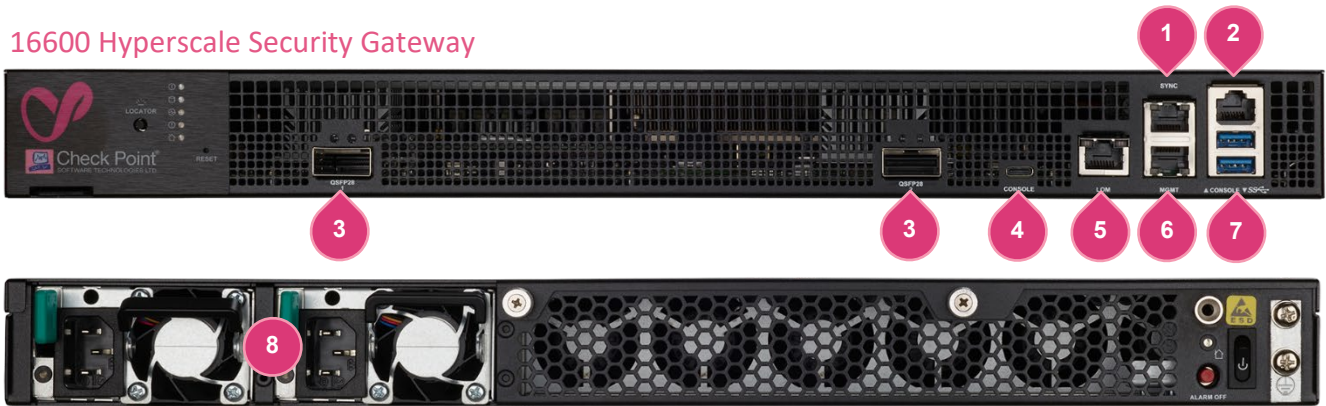
## PERFORMANCE HIGHLIGHTS

Gen II Security Firewall	Gen III Security NGFW <sup>1</sup>	Gen V Security Advanced Threat Prevention <sup>2</sup>
87 Gbps	30 Gbps	17.6 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.

## SPOTLIGHT

### 16600 Hyperscale Security Gateway



- |                                 |                                       |
|---------------------------------|---------------------------------------|
| 1. Sync 10/100/1000 Base-T port | 5. Lights-out Management port         |
| 2. RJ45 console port            | 6. Management 10/100/1000 Base-T port |
| 3. 2x 100 GbE QSFP28 ports      | 7. 2x USB 3.0 ports                   |
| 4. USB Type-C console port      | 8. Redundant hot-swap power supplies  |

#### Prevent Known and Zero-day Threats

Check Point SandBlast Threat Emulation is an evasion-resistant sandbox that provides zero-day protection from advanced and unknown threats. SandBlast Threat Extraction (CDR) ensures quick delivery of safe email and web content to users.

	NGFW	NGTP	SNBT
Firewall, VPN, Mobile Access	✓	✓	✓
Content Awareness	✓	✓	✓
Application Control	✓	✓	✓
Intrusion Prevention System	✓	✓	✓
URL Filtering		✓	✓
Antivirus and Anti-Bot		✓	✓
Threat Emulation (sandboxing)			✓
Threat Extraction (CDR)			✓

*Next Generation Firewall, Next Generation Threat Prevention and SandBlast packages*

#### All-inclusive Security Solutions

Check Point 16600 security gateways include all security technologies in the SandBlast software package for one year. Purchase a renewal for NGFW, NGTP or SandBlast (SNBT) for subsequent years as you like.

#### Hyperscale Network Security

With the Maestro Hyperscale solution you save money by getting the most from your existing resources and scale up to meet new demands. Maestro distributes the load so that each gateway is fully used.



#### 100 and 25 GbE Connectivity

If you're ready to move from 10 to 25 or 100 GbE, so is the 16600 Next Generation Security Gateway. The 16600 Security Gateway lets you connect your server uplinks to your core network.

## DATA CENTER GRADE PLATFORM

1 GbE copper	100/25 GbE	Memory	Redundant Power	LOM
2	2	128 GB	●	●

## SPECIFICATIONS

### Performance

#### Enterprise Test Conditions

Threat Prevention <sup>1</sup> (Gbps)	17.6
NGFW <sup>2</sup> (Gbps)	30
IPS (Gbps)	42
Firewall (Gbps)	87

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

Firewall 1518B UDP (Gbps)	117
VPN AES-128 (Gbps)	17
Connections/sec	375,000
Concurrent connections	32M

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

- 2x CPUs, 24 physical cores, 48 virtual cores
- 1x 480 GB SSD
- 2x AC power supplies
- 128 GB of memory
- Virtual Systems (maximum): 250

### 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 8,500+ 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
- 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: 850W
- Power input: 100 to 240V (47-63Hz), 40~-72VDC
- Power consumption avg/max: AC188W/438W
- Maximum thermal output AC: 1494 BTU/hr.

#### Dimensions

- Enclosure: 1RU
- Dimensions (WxDxH): 17.4 x 24 x 1.73 in. (442 x 610 x 44mm)
- Weight: 28.7 lbs. (13 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>

<sup>1</sup>. factory certificate

## ORDERING QUANTUM 16600 SECURITY GATEWAYS

SECURITY APPLIANCE <sup>1</sup>	SKU
16600 Hyperscale configuration: 2x 1GbE copper ports, 2x 100 GbE QSFP28 ports, 128 GB RAM, 1x 480 GB SSD, 2x AC PSUs, telescopic rails, SandBlast (SNBT) Security Subscription Package for 1 Year.	CPAP-SG16600-HS-SNBT
INTERFACE TRANSCEIVERS	
100G SWDM4, LC connector, 75m/OM3 fiber	CPAC-TR-100SWDM4
100G CWDM4, LC connector, 2Km/ single mode fiber	CPAC-TR-100CWDM4
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
QSFP+ transceiver module for 40G fiber ports - long range (40GBase-LR)	CPAC-TR-40LR-QSFP-10Km
Bi-directional QSFP transceiver for 40G fiber Ports - short range (40GBase-SR-BD)	CPAC-TR-40SR-QSFP-BiDi
SFP28 transceiver module for 25G fiber ports with QSFP28 adaptor - short range (25GBase-SR)	CPAC-TR-25SR-ADP
SFP28 transceiver module for 25G fiber ports with QSFP28 adaptor - long range (25GBase-LR)	CPAC-TR-25LR-ADP
DIRECT ATTACH COPPER CABLES	
100G QSFP28 Direct Attach Copper (DAC) cable, 3 meters	CPAC-DAC-100G-3M
40G Direct Attach Copper (DAC) cable 40BASE-CR4, 3 meters	CPAC-DAC-40G-3M
25G SFP28 Direct Attach Copper (DAC) cable, 3 meters	CPAC-DAC-25G-3M
SPARES AND MISCELLANEOUS	
	SKU
AC power supply for 16600HS, 26000, 28000, 28600HS Security Gateways	CPAC-PSU-AC-26000/28000
Dual DC power supplies for 16000, 26000, 28000 Security Gateways	CPAC-PSU-DC-Dual-16000/26000/28000
DC power supply for 16000 and 26000 Security Gateways	CPAC-PSU-DC-16000/26000/28000
Replacement 16GB RAM memory module for 16600, 28600 Security Gateways	CPAC-RAM16GB-16/28K-HS
Replacement Lights-Out Management Module	CPAC-NLOM-C
Slide rails for 16600 Security Gateways (22" - 32")	CPAC-RAIL-L
Extended slide rails for 16600 Security Gateways (24" - 36")	CPAC-RAIL-EXT-L

<sup>1</sup> Renewal NGFW, NGTP and SandBlast (SNBT) packages are available in the online product catalog.

## ORDERING QUANTUM 16600 (Continued)

### All-inclusive Security

	NGFW	NGTP	SNBT (SandBlast)
	Basic access control plus 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			✓

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