

# SECURING THE FINANCIAL TRADING MARKET

## FAST TRANSACTIONS, ULTRA LOW LATENCY



### FINANCIAL SECTOR NETWORK SECURITY

Check Point 21000 Appliances with Security Acceleration Module

#### CHALLENGE

The financial sector faces several unique challenges that require advanced security solutions. A significant increase in threats and their complexity against financial targets requires more security products to protect the network. The networks continue to grow, with various new networks to protect: Internet and mobile banking platforms, ATMs, trading and exchange centers, and inter-bank communications. These complex financial transactions require unique performance considerations as well – ultra-high connection rates, minimal latency with multicast traffic, and zero downtime.

#### SOLUTION

Built with unique hardware acceleration technologies, the Check Point Security Acceleration Module increases security performance in a high performance network environment. Based on our advanced SecurityCore™ technology, the acceleration module delivers sub-5 micro second latency, making it an ideal candidate for securing latency sensitive networks and applications.

The Security Acceleration Module delivers unprecedented hardware acceleration capabilities. By significantly boosting performance, it enables customers to achieve a session rate of 300,000 connections per second and a forwarding rate of 60 million packets per second with only microseconds of network latency. These new levels of performance secure even the highest performing applications while maintaining the flow of business.

#### LOW LATENCY AND MULTICAST TRAFFIC ENVIRONMENTS

For many high-performance applications and data-centers, low network latency is a critical success factor. For example, financial trading and investment companies rely on rapid execution of transactions --opportunities can appear and disappear in microseconds. For these performance-sensitive environments, the Security Acceleration Module delivers an unprecedented combination of security and performance. Ideal for transaction-oriented environments, the acceleration module delivers sub-5 microseconds of network latency. By enabling security in high-performance environments with minimal latency, there is no longer a trade-off between security and performance.

### SOLUTION BENEFITS

- ✓ Ideal for latency-sensitive financial trading
- ✓ Hardware acceleration for Software Blades with SecurityCore™ technology
- ✓ Accelerate traffic on all interfaces with a single Security Acceleration Module
- ✓ High availability and serviceability
- ✓ Expand security functions by enabling additional Software Blades without adding a new appliance
- ✓ Up to 110 Gbps of firewall throughput



Check Point 21400 Appliance



## ADVANCED SECURITYCORE™ TECHNOLOGY

The Security Acceleration Module features innovative, purpose-built SecurityCore™ hardware technology that uses the power of parallel processing to accelerate key security operations. With 108 dedicated security cores for ultra-fast security performance, you can also offload network security traffic and run many security functions in high-demanding network environments.

## MAXIMUM SECURITY AND PERFORMANCE

Confidently implement the desired security measures for your high-performance, latency-sensitive network environments by improving performances with the acceleration module. Our solution offers maximum security and performance of business critical applications, with up to 110 Gbps of firewall throughput and an overall system power boost to 2,900 SecurityPower™ Units in the 21400 Appliance, 3,300 in the 21700 Appliance and 4300 Units in the 21800 Appliance. Lightning fast performance offers 300,000 connections per second and nine times the forwarding rate with up to 60 million packets per second.

## INTEGRATED WITH EXTENSIBLE SOFTWARE BLADE ARCHITECTURE

Packaged with a set of pre-selected Check Point Software Blades – including Firewall, IPsec VPN, Anti-Bot, Mobile Access and more – the 21000 Appliances provide a turnkey security solution for quick deployment. Further extend and customize protection options with available Software Blade upgrades.

The Check Point Software Blade Architecture is the first and only security architecture to deliver complete, flexible, and manageable security to companies of any size. With unprecedented flexibility and expandability, Software Blades deliver lower cost of ownership and cost-efficient protection that meet any need, today and in the future.

Utilizing superior processing power provided by the SecurityCore™ technology and high throughput hardware, the 21000 Appliances run multiple Software Blades with maximum performance. Confidently deploy additional security features as needed to provide comprehensive and integrated security for your critical business assets.

## ULTRA HIGH PERFORMANCE IN COMPACT 2U RACK-MOUNT CHASSIS

Big performance does not mean big iron. The Security Acceleration Module comes with the Check Point 21400, 21700 and 21800 Appliances, which deliver industry-leading system performance in a compact, space-saving 2U rack-mount chassis. Not only reducing the initial CapEx investment, it also helps cut down the ongoing support cost and total cost of ownership (TCO). The Check Point 21400, 21700 and 21800 with the acceleration module is a smart investment to protect your most valuable business advantages – information and speed.

## SOLUTION FEATURES

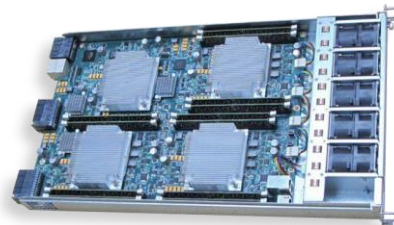
- ✓ 2900-4300 SecurityPower™ Units
- ✓ Simple deployment and management
- ✓ High availability and serviceability
- ✓ Optimized for low latency
- ✓ Maximum security and performance
- ✓ High port density
- ✓ Inspects and accelerates multicast traffic



Check Point 21700 Appliance



Check Point 21800 Appliance



Security Acceleration Module

**With the optional Security Acceleration Module, you can confidently increase firewall and VPN bandwidth through your 21000 Appliance without performance degradation.**

- ✓ Offloads security processing from the general purpose appliance CPU
- ✓ Available as a bundle for significant savings right out of the box

### CONTACT US

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Appliance	21400	21700	21800
<b>Performance</b>			
SecurityPower <sup>1</sup>	2175 / 2900 <sup>2</sup>	3300 / 3551 <sup>2</sup>	4100 / 4300 <sup>2</sup>
Firewall Throughput (Gbps)			
Raw <sup>3</sup>	50 / 110 <sup>2</sup>	78.6 / 110 <sup>2</sup>	78.6 / 110 <sup>2</sup>
Production <sup>5</sup>	17.1 / 44.3 <sup>2</sup>	25.4 / 44.5 <sup>2</sup>	30.4 / 44.5 <sup>2</sup>
Firewall Latency <sup>2</sup>	< 5µs	< 5µs	< 5µs
VPN AES-128 Throughput (Gbps)	7 / 50 <sup>2</sup>	11 / 50 <sup>2</sup>	23.5 / 50 <sup>2</sup>
IPS Throughput (Gbps)			
Recommended <sup>4</sup>	6	8	9.9
Production <sup>5</sup>	3.67	5.7	6.9
Concurrent Connections	10M	13M	28M
Connections per Second	130K / 300K <sup>2</sup>	170K / 300K <sup>2</sup>	198K / 300K <sup>2</sup>
Virtual Systems			
Virtual System Support	Yes	Yes	Yes
Max VS Supported (Default/Max)	125 / 250	150 / 250	150 / 250
Hardware Specifications			
10/100/1000Base-T Ports	13 to 37	13 to 37	13 to 37
1000Base-F SFP Ports	up to 36	up to 36	up to 36
10GBase-F SFP+ Ports	up to 12	up to 13	up to 13
Memory	12, 24 GB	16, 32, 64 GB	16, 32, 64 GB
Storage	2 x 500 GB HDD RAID <sup>1</sup>	2 x 500 GB HDD RAID <sup>1</sup>	2 x 500 GB HDD RAID <sup>1</sup>
I/O Expansion Slots	3	3	3
LOM	Included	Included	Included
Dimensions			
Enclosure	2U	2U	2U
Dimensions (standard)	17" W x 28" D x 3.5" H		
Dimensions (metric)	431 mm W x 710 mm D x 88 mm H		
Weight	26 kg (57.4 lbs.)		
Environment			
Operating Environment	Temperature: 32° to 104°F / 0° to 40°C; Relative Humidity 20% to 90% (non-condensing)		
Non-Operating Environment	Temperature: -4° to 158°F / -20° to 70°C; Relative Humidity 5% - 95% (non-condensing)		
Power			
Redundant Hot-Swap Power Supply	Yes	Yes	Yes
Power Input	100~240VAC, 47~63Hz		
Power Supply Spec (Max)	2 x 910W	2 x 1200W	2 x 1200W
Power Consumption (Max)	449W / 744W <sup>2</sup>	489W / 784W <sup>2</sup>	489W / 784W <sup>2</sup>
Certifications			
Safety	CB, UL, cUL, CSA, TUV		
Emissions	CE, FCC VCCI, C-Tick		
Environmental	RoHS		

1 Check Point's SecurityPower™ is a new benchmark metric that allows customers to select security appliances by their capacity to handle real-world network traffic, multiple security functions and a typical security policy

2 With Security Acceleration Module

3 Raw throughput is based on RFC 3511 with 1518 bytes UDP packets

4 Recommended IPS profile, IMIX traffic blend

5 Assumes maximum production throughput environment with real-world traffic blend, a typical rule-base size, NAT and logging enabled and the most secure threat prevention protection