



# CHECK POINT 41000 AND 61000 SECURITY SYSTEMS

## CHECK POINT SECURITY SYSTEMS

Scalable performance, advanced security

### Product Benefits

- Scalable platform that grows with your business
- High port density with 40GbE and 10GbE fiber ports
- Full redundancy (N+N, N+1) eliminates down-time
- Designed for ease of management and fast deployment

### Product Features

- Scalable security solution from 3,200 up to 33,000 SecurityPower units
- High raw firewall performance of up to 80 Gbps in the 41000 and 400 Gbps in the 61000
- Real-world IPS performance up to 25 Gbps in the 41000 and 70 Gbps in the 61000
- High port density with up to 30x10GbE, 4x40GbE in the 41000 and 60x10GbE, 8x40GbE in the 61000
- Intra/Dual-Chassis redundancy
- Carrier grade ATCA compliant chassis

## INSIGHTS

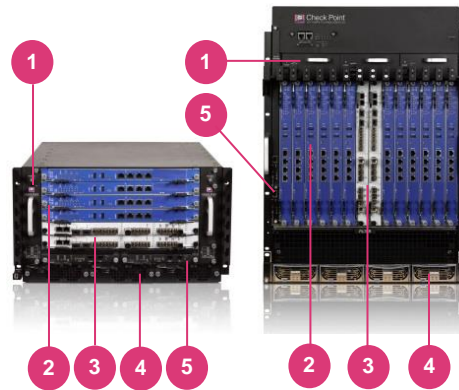
Large data centers have uncompromising needs for performance, uptime and scalability. High end security gateway solutions must perform network access control within the unique requirements of these environments—ultra-high throughput, connection capacity, session and logging rate—while supporting the latest networking standards like IPv6. With the increase in sophisticated attacks, additional security layers such as IPS, Application Control, URL Filtering, Antivirus and others are also required. In addition to their vast performance and security needs, data center environments are characterized by rigid requirements for high reliability of its various systems. All of these requirements drive the need for redundant, serviceable and highly available components and systems.

## SOLUTION

The Check Point 41000 and 61000 Security Systems are built for these demanding environments and are based on proven technologies used by Fortune 100 companies and telecommunication vendors all over the world. The Check Point Firewall, IPS, Application Control and Identity Awareness technologies have been awarded the highest 3rd-party certifications possible including NATO Information Product Catalog; US Government penetration testing; Department of Defense Information Systems Agency, ISO-IEC 15408 and more.

The ATCA compliant, carrier grade design offers unsurpassed scalability, availability and serviceability with high performance and high port density. Redundant Security Switch Modules (SSM) provides switching fabric, physical interface, and routing functions. Redundant Chassis Management Modules (CMM) continuously checks and monitors the health of the chassis including fans, power supplies and Security Gateway Modules (SGM). For optimal reliability, Check Point ClusterXL Load Sharing distributes the load between Security Gateway Modules in one chassis and ClusterXL High Availability operates between chassis. Check Point SyncXL provides for highly efficient synchronization of system and security information between components in order to ensure high system performance. Deploy two chassis in high availability mode to eliminate down-time.

- 41000 and 61000**
- 1 Fan Trays
- 2 Security Gateway Modules (SGM)
- 3 Security Switch Modules (SSM)
- 4 Power Supplies
- 5 Chassis Management Modules (CMM)



As mission-critical networks evolve, their security is pushed to perform at higher levels. Optimized for the Check Point Software Blade Architecture, these two platforms improve security, protect business continuity and reduce operational costs in complex, mission critical security environments such as data centers, Managed Service Providers and telecommunication companies. By adding more SGMs companies get more security and performance with up to 25 Gbps and 70 Gbps of real-world IPS throughput from the 41000 and 61000 respectively. Because SGMs are hot-swappable, customers can add SGMs, boosting performance to new or existing 41000 and 61000 systems even when those systems are in production.

## 41000 SECURITY SYSTEM

The Check Point 41000 Security System is a compact 6U ATCA compliant chassis that can contain up to 4 Security Gateway Modules (SGM) and 2 Security Switch Modules (SSM). The 41000 chassis distributes the load evenly among the SGMs ensuring near linear scalability from 20 up to 80 Gbps of firewall throughput as SGMs are added to the chassis. Offering lightning-fast multi-layer security performance, the 41000 Security System delivers a SecurityPower range starting at 3,200 Security Power Units with 1 SGM and scales to 11,000 SPUs with 4 SGMs. In addition to its performance scalability, the 41000 is based on the extensible Software Blade Architecture which facilitates the addition of new and additional software blades. The shared design, components, and the flexibility to add additional security controls facilitates future expansion and growth of the network infrastructure, providing excellent investment protection.

## 61000 SECURITY SYSTEM

The Check Point 61000 Security System is the industry's fastest security system that can achieve up to 400 Gbps of throughput in a single firewall instance. Even more, the ability to support 210 million concurrent connections and 3 million sessions per second brings unparalleled performance to multi-transaction environments.

The 61000 Security System is an ATCA compliant, scalable system that can contain up to 12 Security Gateway Modules (SGM) and 2 or 4 Security Switch Modules (SSM). The SSMs distribute the load evenly across the 1.2 Tbps chassis backplane fabric to the SGMs ensuring near linear scalability from 80 up to 400 Gbps as SGMs are added to the chassis.

Offering lightning-fast security performance, the 61000 Security System delivers a SecurityPower range starting at 3,200 units with 1 SGM and scaling up to 33,000 units with 12 SGMs and 2 SSMs. In addition to its performance scalability, the 61000 Security System, based on the Check Point Software Blade Architecture, can be widely extended by adopting new and additional software blades. The 61000 Security System has been designed from the ground up to support the unique service requirements of Telco's and data centers. This includes system level redundancy and chassis level redundancy of the components that comprise the 61000: power-supplies, fans and the various hardware modules.

## VIRTUAL SYSTEMS

Check Point Virtual Systems enable organizations to harness the power of the 41000 and 61000 by creating up to 250 virtualized security gateways to consolidate infrastructure and segment the network while reducing costs and offering customized per-Virtual System Software Blade security. The solution supports seamless performance scale-up by adding more Virtual Systems and hardware blades, with traffic evenly balanced across the entire chassis.

## EASE OF MANAGEMENT

With the available local management console and an intuitive configuration wizard, the first Security Gateway Module can be deployed in less than 30 minutes. Additional Security Gateway Modules can be added seamlessly. The 41000 and 61000 also works with renowned Check Point Security Management Software for secure and centralized administration from anywhere in the network.

## PERFORMANCE

	41000	61000
<b>Production Performance</b>		
SecurityPower <sup>1</sup>	3,200 to 11,000	3,200 to 33,000
Firewall Throughput (Gbps)	Up to 40	Up to 120
IPS Throughput (Gbps)	Up to 25	Up to 70
<b>RFC 3511, 2544, 2647, 1242 Performance Tests (LAB)</b>		
Firewall Throughput, 1518 byte UDP (Gbps)	Up to 80	Up to 400
VPN Throughput AES-128 (Gbps)	Up to 40	Up to 110
IPS Recommended Profile IMIX traffic blend (Gbps)	Up to 44	Up to 130
Connections Per Second (M)	Up to 1.1	Up to 3
Concurrent Sessions (M)	Up to 80	Up to 210
SGM220 (Not supported in 4xSSM - Default/Max)	0/0	0/12
SGM220T for NEBS (Default/Max)	0/0	0/12
SGM260 (Default/Max)	1/4	2/12
<b>Virtual Systems</b>		
Maximum	250	

<sup>1</sup> Maximum production performance based upon the SecurityPower benchmark. Real-world traffic, Multiple Software Blades, Typical rule-base, NAT and Logging enabled. Check Point recommends 50% SPU utilization to provide room for additional Software Blades and future traffic growth. Find the right appliance for your performance and security requirements using the Appliance Selection Tool.

## NETWORK

	41000	61000
	2 Security Switch Modules (SSM160)	4 Security Switch Modules (SSM160)
40GBase-F QSFP (Max ports)	4	8
10GBase-F SFP+ (Max ports with 4x10GbE QSFP splitters)	30	60
10GBase-F SFP+ (Max ports without 4x10GbE QSFP splitters)	14	28
1 GbE copper or fiber (Max ports)	14	28
<b>SSM160 Transceivers</b>		
Network and Synchronization	QSFP transceiver for 40GbE ports (SR/LR) QSFP Splitter for 40 GbE ports SFP+ (10GbE) Fiber transceiver for SFP+ ports (SR/LR) SFP (1GbE) Fiber transceiver for SFP+ ports (SX/LX) Twisted pair (1GbE) transceiver for SFP+ ports	
Management and Log	SFP+ (10GbE) Fiber transceiver for SFP+ ports (SR/LR) Fiber transceiver for 1GbE SFP+ ports (SX/LX) Twisted pair transceiver for 1GbE SFP+ ports (SX/LX)	

## HARDWARE

	41000	61000
<b>Physical</b>		
Enclosure	6U	15U (with AC PSUs)
Dimensions Standard (WxDxH)	17.64 x 16.3 x 10.5 in.	17.63" X 15.2" D x 26.2" H in.
Dimensions Metric (WxDxH)	448 x 413.4 x 266.7 mm	448 x 385.6 x 665 mm
Weight (chassis without SGMs)	23 kg (51 lbs.)	47 kg (96 lbs.)
Weight (fully populated)	38.6 kg (84.9 lbs.)	65.84 kg (145 lbs.)
<b>AC Power</b>		
Power Supplies	3	4
Input Voltage	100-240VAC	90-246VAC
Frequency	50-60 Hz	47-63Hz
Single Power Supply Rating	1200W @ 110V, 1500W @ 220V	2500W @ 208V/230V, 1500W @ 110V (USA), 1300W @ 100V (Japan)

DC Power		
Power Entry Modules (PEM)	2	2
Input	-48V to -60V, four feeds per module, 50 Amps per feed	-48V to -60V, Five feeds per module, 50 Amps per feed
Power Consumption		
Maximum	2300W	4900W
Thermal Output	7847.9 BTU/hour	16,660 BTU/hour
Operating Environmental Conditions		
Temperature	23° to 131°F / -5° to 55°C	
Humidity	5%-90% (non-condensing)	
Storage Conditions		
Temperature	-40° to 158°F / -40° to 70°C	
Humidity	5%-95% (non-condensing)	
Certifications		
Safety	UL	CB, UL/cUL/SCA, TUV
Emissions	CE, FCC part 15	CE, FCC part 15, VCCI, C-Tick
Environmental	ETSI, RoHS	RoHS

## SOFTWARE BLADE PACKAGE SPECIFICATIONS

Base System	SKU
61000 Security System with AC power in a base configuration; includes Chassis, 2xCMM, 2xSSM160, 2xSGM260, fans and AC Power Supplies with 5 Software Blades (Firewall, VPN, Identity Awareness, Advanced Networking, Acceleration & Clustering blades)	CPAP-SG61005-NG-BASE
61000 Security System with DC power in a base configuration; includes Chassis, 2xCMM, 2xSSM160, 2xSGM260, fans, and DC Power Supplies with 5 Software Blades (Firewall, VPN, and Identity Awareness. Advanced Networking, Acceleration & Clustering blades)	CPAP-SG61005-NG-BASE-DC
41000 Security System with AC power in a base configuration; includes Chassis, 2xCMM, 1xSSM160, 2xSGM260, fans, and AC Power Supplies with 5 Software Blades (Firewall, VPN, Identity Awareness, Advanced Networking, Acceleration & Clustering blades)	CPAP-SG41005-BASE
41000 Security System with DC power in a base configuration; includes Chassis, 2xCMM, 1xSSM160, 2xSGM260, fans, and DC Power Supplies with 5 Software Blades (Firewall, VPN, Identity Awareness, Advanced Networking, Acceleration & Clustering blades)	CPAP-SG41005-BASE-DC
Software Blades <sup>1</sup>	SKU
Check Point IPS blade for 1 year	CPSB-IPS-XXL-1Y
Check Point Application Control blade for 1 year	CPSB-APCL-XXL-1Y
Check Point URL Filtering blade for 1 year	CPSB-URLF-XXL-1Y
Check Point Antivirus Blade for 1 year	CPSB-AV-XXL-1Y
Check Point Anti-Bot blade for 1 year	CPSB-ABOT-XXL-1Y
Check Point Mobile Access Blade for unlimited concurrent connections	CPSB-MOB-U
Data Loss Prevention Blade for 1 year (for 1,500 users and above, up to 250,000 mails per hour and max throughput of 2.5 Gbps)	CPSB-DLP-U-1Y
Virtual Systems Packages	SKU
50 Virtual Systems package	CPSB-VS-50
50 Virtual Systems package for HA/VLSL	CPSB-VS-50-VLSL
25 Virtual Systems package	CPSB-VS-25
25 Virtual Systems package for HA/VLSL	CPSB-VS-25-VLSL
10 Virtual Systems package	CPSB-VS-10
10 Virtual Systems package for HA/VLSL	CPSB-VS-10-VLSL

<sup>1</sup> Two and three year SKUs are also available. See the online Product Catalog

## ACCESSORIES

Security Switch Modules	SKU
Security Switch Module SSM160 for 41000 and 61000 System with 8x10GbE and 2x40GbE fiber ports	CPAP-SSM160
SFP+ transceiver module for 10G fiber ports- long range (10GBase-LR) for CPAC-SSM160	CPAC-TR-10LR-SSM160-SFP+
SFP+ transceiver module for 10G fiber ports- short range (10GBase-SR) for CPAC-SSM160	CPAC-TR-10SR-SSM160-SFP+
QSFP transceiver module for 40G fiber ports- short range (40GBase-SR4) for CPAC-SSM160	CPAC-TR-40SR-SSM160-QSFP
QSFP transceiver module for 40G fiber ports- long range (40GBase-LR4) for CPAC-SSM160	CPAC-TR-40LR-SSM160-QSFP
QSFP splitter for 40G fiber ports- Short Range for CPAC-SSM160- 3 Meter	CPAC-TR-40SPLIT-QSFP-SR-3M
QSFP splitter for 40G fiber ports for CPAC-SSM160 6 meter	CPAC-TR-40SPLIT-QSFP-6M
SFP transceiver for 1G fiber port- short range (1000Base-SR) for CPAC-SSM160	CPAC-TR-1SR-SSM160-SFP
SFP transceiver for 1G fiber port- long range (1000Base-LX) for CPAC-SSM160	CPAC-TR-1LX-SSM160-SFP
1000Base-T (RJ45) transceiver to use with 10G SFP+ ports on CPAC-SSM160	CPAC-TR-H-160-SFP
Security Gateway Modules	
Security Gateway Module SGM260 with 64GB RAM for 41000 and 61000	CPAP-SGM260
Security Gateway Module SGM220 for 61000	CPAP-SGM220
Security Gateway Module SGM220T (NEBS ready) for 61000	CPAP-SGM220T
Security Gateway Module SGM220 with 24GB RAM and NEBS for 61000	CPAP-SGM220T-24GB
Security Gateway Module SGM220 and 24GB RAM for 61000	CPAP-SGM220-24GB

Miscellaneous	SKU
Memory upgrade to 24GB RAM for CPAC-SGM220 and CPAC-SGM220T for 61000	CPAC-RAM24GB-SGM
Check Point 61000 Chassis	CPAC-CHASSIS-61000-NG
Check Point 61000 Chassis with DC Power Supplies and Fans	CPAC-CHASSIS-61000-NG-DC
Check Point 41000 Chassis	CPAC-CHASSIS-41000
Check Point 41000 Chassis with DC Power Supplies and Fans	CPAC-CHASSIS-41000-DC
Additional/replacement 41000 and 61000 Chassis Management Module CMM 100	CPAC-CMM100-NG
Replacement parts kit (including one AC Power Supply, one Fan) for 61000 Security System	CPAC-SPARE-61000-NG
Replacement parts kit (including one DC Power Supply, one Fan) for 61000 appliance	CPAC-SPARE-61000-NG-DC
Replacement AC Power Supply for 61000 Security System	CPAC-PSU-AC-61000-NG
Replacement DC Power Supply for 61000 Security System	CPAC-PSU-DC-61000-NG
Replacement fan for 61000 Security System	CPAC-SPARE-FAN-61000-NG
Replacement parts kit (including one AC Power Supply, one Fan) for 41000 Security System	CPAC-SPARE-41000
Replacement parts kit (including one DC Power Supply, one Fan) for 41000 appliance	CPAC-SPARE-41000-DC
Replacement AC Power Supply for 41000 Security System	CPAC-PSU-AC-41000
Replacement DC Power Supply for 41000 Security System	CPAC-PSU-DC-41000
Replacement fan for 41000 Security System	CPAC-SPARE-FAN-41000

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