

# Nokia IP Security Solutions

Nokia IP390



## Nokia for Business



**Nokia IP390 Security Platform is a highly versatile, easy to install and easy to manage security appliance running Check Point VPN-1. Nokia IP390 provides the intuitive out-of-box experience needed by medium businesses, but also provides the sophisticated management and security large businesses need for remote campuses, large branch offices and internal network segmentation.**

Nokia IP390 Security Platform is a 1RU security appliance providing multigigabit performance, four integrated 10/100/1000 Ethernet interfaces and two expansion slots supporting up to eight additional 10/100 Ethernet interfaces or up to four additional gigabit Ethernet interfaces for the Check Point VPN-1 UTM suite of applications. Nokia IP390 running Check Point VPN-1 provides up to:

- 3 Gbps of firewall throughput
- 30,000 firewall connections per second
- 500 Mbps of AES256 VPN throughput

Nokia IP390 offers the option of either disk- or flash-based storage configurations. Additionally, Nokia IP390 can be configured with hybrid (flash and compact disk) local storage. The Nokia IP390 hybrid configuration uses flash storage for Nokia IPSO and the Check Point enforcement module, and local disk for management and logging.

Ideal for medium businesses or large business campuses or larger branch offices requiring gigabit performance and

interface expandability, Nokia IP390 is also well suited for internal network segmentation.

Like all Nokia Firewall/VPN Appliances, Nokia IP390 is a best-of-breed, trusted security appliance purpose-built to run the Check Point VPN-1 firewall application, and it is optimized to provide:

- Consistent in-line reliability
- Ease of management
- Simple acquisition and implementation

### Consistent In-line Reliability

Nokia Firewall/VPN appliances are purpose-built to protect corporate applications and data while running in-line within the world's most demanding network environments, and architected specifically for the demands of Check Point VPN-1.

Nokia IPSO™ operating system natively supports key networking needs such as dynamic and multicast routing, IPv6, VLANs, and link aggregation, making integration into complex networks transparent.

For optimal reliability, Nokia IP390 can be configured with hybrid local storage, and includes VRRP and IP Clustering for high availability.

### Ease of Management

To increase administrator productivity, Nokia Firewall/VPN appliances make executing sophisticated security simple. The acclaimed Check Point SMART Management framework simplifies complex policy definition and deployment. Nokia Network

Voyager and Cluster Voyager provide complete local and remote WebUI appliance management, and Nokia Horizon Manager and Nokia Appliance Manager provide simple, comprehensive, centralized management of multiple appliances.

### Simple Acquisition and Implementation

Nokia Firewall/VPN appliances minimize acquisition and installation complexity. Stable hardware configurations are pre-tested and pre-integrated with Check Point VPN-1 and Nokia IPSO. Nokia IPSO is security-hardened and supports key capabilities such as role-based administration, AAA, and TACACS+ client, 3rd party administrator authorization and the elimination of the need for local administrator accounts that many compliance mandates require. Check Point VPN-1 is preinstalled on the appliance, and native Nokia IPSO features—such as software acceleration, dynamic and multicast routing, and high availability—are included with no additional installation, licensing, or activation required.

### Nokia First Call—Final Resolution Support

Best of all, like all Nokia Firewall/VPN Appliances, Nokia IP390 and Check Point VPN-1 are both backed by world-class Nokia First Call—Final Resolution support and service. Nokia First Call—Final Resolution offers a single point of technical support and assistance for both Nokia IP390 and Check Point VPN-1.

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# Technical Specifications

<b>Internet Protocols</b> <ul style="list-style-type: none"> <li>IP RFC 791</li> <li>ICMP RFC 792</li> <li>ARP RFC 826</li> <li>ICMP Router Discovery (server) RFC 1256</li> <li>CIDR RFC 1519</li> <li>Static Routes</li> <li>RIP RFC 1058</li> <li>RIP Version 2 (with authentication) RFC 1723</li> <li>OSPF RFC 2328</li> <li>DVMRP (multicast) RFC 1075</li> <li>IGMP (multicast) RFC 2236</li> <li>PIM-DM (multicast), PIM-SM</li> <li>Multicast Tunnels</li> <li>IGRP (optional) Cisco</li> <li>BGP4 (optional) RFC 1771</li> <li>IPv6 Core RFCs</li> <li>Requirements for IPv4 Routers RFC 1812</li> <li>Differentiated Services (EF) RFC 2598</li> <li>Bootp/DHCP Relay RFC 2131</li> <li>Route Aggregation and Redistribution</li> <li>Unnumbered Interfaces</li> </ul>	
<b>LAN Support</b> <ul style="list-style-type: none"> <li>10/100 BASE-TX (10/100 Mbps Ethernet), copper</li> <li>1000 BASE-T (10/100/1000 Mbps Ethernet), copper</li> <li>1000BASE-SX (1000 Mbps Ethernet), MMF Fiber</li> </ul>	
<b>Performance</b> <ul style="list-style-type: none"> <li>Firewall – large packets 3.0 Gbps</li> <li>VPN – large packets 500 Mbps, AES256</li> <li>CPS – 30,000 CPS</li> </ul>	
<b>Management</b> <ul style="list-style-type: none"> <li>SNMP RFC 1157, SNMPv2c, SNMPv3</li> <li>Telnet RFC 854</li> <li>FTP RFC 959</li> <li>SSHv2 (secure Telnet and FTP)</li> <li>HTTP Server RFC 2068</li> <li>SSL/TLS RFC 2246</li> <li>Command Line Utilities</li> <li>Supported in Nokia Horizon Manager</li> </ul>	
<b>Environment</b> <ul style="list-style-type: none"> <li>Temperature: 23°F to 113°F / -5°C to 45°C</li> <li>Humidity: 10% - 90% (non-condensing)</li> <li>Altitude: 10,000 feet</li> </ul>	
<b>High Availability</b> <ul style="list-style-type: none"> <li>VRRP RFC 2338</li> <li>FireWall-1 State Sync</li> <li>Patented Nokia IP Clustering</li> </ul>	
<b>Security</b> <ul style="list-style-type: none"> <li>Secure Administrative Access</li> <li>Role-Based Administration</li> <li>3rd party administrator authorization</li> <li>Read/Write and Read-Only Access Modes</li> <li>SSH (secure Telnet and FTP)</li> <li>SSL/TLS (secure HTTP) RFC 2246</li> <li>S/Key (one-time password) RFC-1760</li> <li>Access Control Lists</li> <li>Traffic Management</li> <li>MD5 Routing</li> <li>Authentication (RIPv2) RFC 1723</li> <li>Centralized Authentication</li> <li>Native IPSec (for non-firewall applications)</li> <li>DNS Client, NTP Client and Server</li> <li>RADIUS Client, TACACS+ Client</li> </ul>	
<b>System Indicators</b> <ul style="list-style-type: none"> <li>10/100/1000 Ethernet port status</li> <li>Power status on system</li> <li>Failure status on system</li> <li>Port status on network interface cards</li> <li>System Operational Indicator</li> </ul>	
<b>Supported Standards*</b> <ul style="list-style-type: none"> <li>IPSec (RFCs 2401-2411, 2451)</li> <li>GRE (RFCs 1701 and 1702) Generic Routing Encapsulation</li> <li>Designed to meet FIPS 140-2</li> <li>* Directive 2002/95/EC Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)</li> <li>* Directive 2002/96/EC Waste Electrical and Electronic Equipment (WEEE)</li> </ul>	
<b>Safety</b> <ul style="list-style-type: none"> <li>UL1950, CAN/CSA 22.2, No. 950-M95, (CE Mark) EN60950:1992, A1, A2:1993, A3:1995, A4:1997, A11:1998 with Japanese National Deviations Emission Compliance</li> </ul>	
<b>Emission Compliance</b> <ul style="list-style-type: none"> <li>FCC Part 15, Subpart B, Class A, EN50024, EN55022A: 1998, CISPR 22 Class A: 1985, EN61000-3-2, EN61000-3-3</li> </ul>	
<b>Immunity</b> <ul style="list-style-type: none"> <li>EN55024: 1998</li> </ul>	
<b>Base System Configuration</b> <ul style="list-style-type: none"> <li>1GB System RAM, expandable to 2GB</li> <li>4 integrated 10/100/1000 Ethernet interfaces</li> <li>Integrated PCMCIA slot</li> </ul>	
<b>Optional PMC Cards</b> <ul style="list-style-type: none"> <li>4-port 10/100 BASE-TX, copper</li> <li>2-port 10/100/1000 BASE-T, copper</li> <li>2-port 1000 BASE-SX, MMF</li> </ul>	
<b>Dimensions</b> <ul style="list-style-type: none"> <li>Height – 1.75 in (4.4 cm) – 1U</li> <li>Width – 17 in (43.2 cm) without mounting brackets – 1U; or 19 in (48.2 cm) with mounting brackets</li> <li>Depth – 17 in (43.2 cm)</li> <li>Depth – 17.5 in (44.5 cm) at handles, standard bracket position</li> <li>Weight – 18 lbs (8.2 kg) with mounting brackets</li> <li>Front access for upgrades and maintenance</li> </ul>	
<b>Power Requirements</b> <ul style="list-style-type: none"> <li>AC Input 100-120V / 200-240V</li> <li>Frequency 50 / 60 Hz</li> <li>AC Input Current 3A</li> </ul>	

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