

Nokia IP Security Solutions

Nokia IP1220

The robust and cost-effective Nokia IP1220 Security Platform supports the sophisticated traffic requirements present in large enterprises and service provider networks.

Providing robust performance with one of the industry's leading dollar per megabit throughput, Nokia IP1220 is a purpose-built IP Security Platform for running Check Point™ Firewall/VPN SecureXL 2.x and Nokia Secure Access System software. This platform runs the latest version of Nokia IPSO™ secure operating system which, in combination with Nokia IP1220, delivers leading technology for companies that need resilient, long-term high performance perimeter security solutions.

From inception, Nokia IP1220 was designed to grow continually to meet increasing network traffic needs. To ensure top performance and network uptime, Nokia IP1220 delivers redundant capabilities supported by Nokia IPSO such as VRRP and clustering, as well as built-in hardware

redundancy features including hot swap interface cards, optional load sharing power supply and fan as well as optional mirrored hot swap capable hard disks.

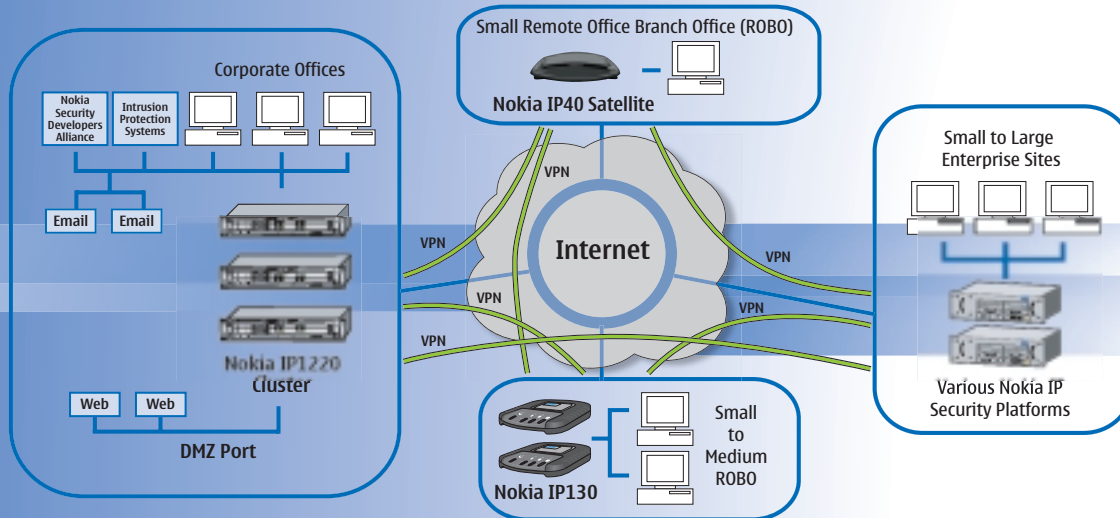
Nokia continues to deliver industry-leading, best-of-breed solutions to meet stringent security needs. These solutions include technologies supporting traditional VPN and firewall designs as well as new Nokia clientless VPN access software Nokia Secure Access System. Nokia IP1220 also supports select third-party Nokia OK interoperable security, monitoring, and management software solutions. By combining excellent price, performance and management to deliver the industry's best power and reliability, Nokia IP1220 supports financial and medical institutions, as well as the data center needs of service providers and large enterprise networks—all at a low Total Cost of Ownership.

The value of Nokia IP1220 is further enhanced with the high-speed encryption accelerator card and up to 2GB of RAM. With its expansion capacity it can service



a multitude of network segments for a large and growing network infrastructure with up to twenty 10/100 Ethernet or eight 1000 GigE connections in a variety of customer selected configurations. Additionally, Nokia IP1220 can be managed with the web-based Nokia Network Voyager interface, a command line interface for single device management or Nokia Horizon Manager for multi-device management. Nokia IPSO brings added value to Nokia IP1220 with support for a wide array of protocols such as RADIUS client server, TACACS+ Client and others.

Best of all, security, performance and reliability are backed by world-class Nokia First Call—Final Resolution global support and service.



Nokia IP1220 At a Glance

Internet Protocols

- IP RFC 791
- ICMP RFC 792
- ARP RFC 826
- ICMP Router Discovery (Server) RFC 1256
- CIDR RFC 1519
- Static Routes
- RIP RFC 1058
- RIP Version 2 (With authentication) RFC 1723
- OSPF RFC 2328
- DVMRP (multicast) RFC 1075
- IGMP (multicast) RFC 2236
- PIM-DM (multicast), PIM-SM
- Multicast Tunnels
- IGRP (optional) Cisco
- BGP4 (optional) RFC 1771
- IPv6 core RFCs
- Requirements for IPv4 Routers RFC 1812
- Differentiated Services (EF) RFC 2598
- Bootp/DHCP Relay RFC 2131
- Route Aggregation & Redistribution
- Un-numbered Interfaces

LAN Support

- 10/100 Mbps Ethernet
- 1000 Base Multi-mode fiber (MMF) LC connector
- 1000 BaseT (10/100/1000 Mbps)

WAN Support

- PPP RFC 1661, 1662
- Frame Relay FRF.1, RFC 1490
- HDLC Cisco

Performance

- Firewall forwarding (2.4 Gbps)
- VPN forwarding (750 Mbps)
- FW Connections Per Second (20k CPS)

Management

- SNMP RFC 1157, SNMPv2c, SNMPv3
- Telnet RFC 854
- FTP RFC 959
- SSHv2 (secure Telnet & FTP)
- HTTP Server RFC 2068
- SSL/TLS RFC 2246
- Command Line Utilities
- Supported in Nokia Horizon Manager

High Availability

- VRRP RFC 2338
- FireWall-1 State Sync
- Nokia Patented IP Clustering
- Disk mirroring

Security

- Secure Administrative Access
- Read/Write and Read-Only Access Modes
- SSH (secure Telnet & FTP)
- SSL/TLS (secure HTTP) RFC 2246
- S/Key (one-time password) RFC 1760
- Access Control Lists
- Traffic Management
- MD5 Routing
- Authentication (RIPv2) RFC 1723
- Centralized Authentication
- Native IPsec (for non-firewall applications)
- DNS Client, NTP Client and Server
- RADIUS Client, TACACS+ Client

Application Acceleration

- VPN

System Indicators

- Integrated 10/100 Ethernet port status
- Power status on system
- Failure status on system
- Operational, activity, hard drive hot-swap status
- Power status on PMC carrier card
- Port status on network interface cards

Environment

- Temperature: 5°C to 40°C
- Humidity: 10% - 90% (non-condensing)
- Altitude: 10,000 ft

Supported Standards

- IPsec (RFCs 2401-2411, 2451)
- GRE (RFCs 1701 & 1702) Generic Routing Encapsulation
- Designed to meet NEBS III, and FIPS 140-2 (kit required)

Safety

- 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
- FCC Part 15, Subpart B, Class A, EN50024, EN55022A 1998, CISPR 22 Class A 1985, EN61000-3-2, EN61000-3-3

Immunity

- EN55024 1998



Nokia IP1220

Large Enterprise and Service Providers

Standard:

- 512 MB System RAM
- 1 IDE Hard Disk Drive
- 4 integrated 10/100 Mbps Ethernet ports
- 2 6U PCI slots that for up to 4 PMC Interface Cards
- 2 Type II PCMCIA slots

Optional PMC Network Interface Card:

- 2-Port 10/100 Mbps Ethernet
- 2-Port 1000BaseF Multi-mode fiber (MMF)
- 2-Port 1000 BaseT (10/100/1000 Mbps)
- 4-Port 10/100 Mbps Ethernet

Hardware:

- Height: 3.46 in. (8.79cm) – 2RU
- Width: 19 in. (48 cm) – w/rack mounting ears
- Depth: 21.15 in. (53.72 cm)
- Weight 30 lbs / 13.6 kg
- Front access for maintenance

Power Requirements:

- AC Input Voltage 100-120V/200-240VAC
- Frequency 50/60Hz
- AC Input Current 3.0/1.5A



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