



Continent 4

Next Generation Firewall



Firewall performance up to 80 gb/s



Centralized management







VPN performance up to 9 gb/s



High performance IPS

Appliances

Segment	Key properties	Appliances
 Branch Office	Deployment site: Branch or Small Office Form Factor: Desktop Interfaces: 1 GbE, 1G SFP NGFW Throughput: 280 Mbps to 1 Gbps FW Throughput: 1,6 Gbps 2,7 Gbps	IPC-10, IPC-50, IPC-R10, IPC-R50
 Enterprise	Deployment site: Enterprise network perimeter Form Factor: Desktop, 1U Interfaces: 1 GbE, 1G SFP NGFW Throughput: 1,25 Gbps to 4,8 Gbps FW Throughput: 5,4 Gbps to 24 Gbps	IPC-R300, IPC-R550, IPC-R800
 Datacenter	Deployment site: Enterprise network perimeter, internal network Form Factor: 1U Interfaces: 1 GbE, 1G SFP, 10G SFP+, 40G QSFP+ NGFW Throughput: 7 Gbps to 9 Gbps FW Throughput: 40 Gbps or 55 Gbps Special feature: Cryptographic accelerator	IPC-R1000, IPC-R3000, IPC-3000F, IPC-3000F40
 Large datacenter	Deployment site: Internal firewall Form Factor: 1U Interfaces: 1 GbE, 1G SFP, 10G SFP+ FW Throughput: 40 Gbps or 80 Gbps Special feature: High throughput, throughput doesn't decrease with large number of firewall rules	IPC-R1000, IPC-R1000NF2, IPC-R3000, IPC-3000NF2

Integrated components



FW

IPS

App
Control

L2 VPN

L3 VPN

MGMT

Threat
Intelligence

Log

URL
Filtering

Antivirus

GeoIP

Key features

Intrusion detection and prevention

- Two modes:
 - L3 IPS;
 - L2 IPS.
- Logging of attack data:
 - Subject/object of attack, IP address, port number;
 - Date and time;
 - Attack type;
 - Attack traffic dump.
- Event notifications:
 - By Email.
- Inhouse signature developing laboratory.
- Anti-malware engine.
- ICAP integration.

Management and monitoring

- Centralized management of:
 - Network (Security) Gateways;
 - Routing settings;
 - Access control rules;
 - VPN;
 - Encryption keys.
- Real-time monitoring of security events.
- Role-based administrator's access control.
- High performance system for storing and processing security events.
- Remote update (System software and signatures).
- Integration with SIEM.
- API.

Network capability

- VRF.
- WAN channel high availability.
- VPN channel high availability.
- Dynamic routing support:
 - OSPF;
 - BGP.
- Multicast-routing support.
- VLAN support (IEEE802.1Q).
- NAT support:
 - Source NAT;
 - Destination NAT;
 - Bidirectional NAT.
- Built-in DHCP server:
 - DHCP server;
 - DHCP relay.
- Support of VoIP.
- Traffic mirroring mode:
 - Configurable SPAN port.
- Virtual IP address support:
 - NAT over VPN tunnel.
- LLDP.
- BFD.

Protection

- Stateful Inspection.
- Application control (DPI).
- Intrusion prevention.
- Malicious websites blocking.
- URL filtration.
- Geo-based filtration.
- SSL decryption.
- Network Behavior Anomaly Detector.
- Proxy-server:
 - Transparent mode;
 - Explicit mode.
- Traffic filtering by:
 - IP address, groups of IP addresses, source and destination IP address range;
 - Port numbers;
 - Protocols;
 - Types and codes of ICMP messages;
 - Packet direction;
 - Client or server in TCP connection;
 - Schedule.
- User Identification and authentication:
 - Identification Agent on an end-user device;
 - Authentication Portal;
 - SSO with Kerberos.

Encryption

- Key scheme:
 - Site-to-site VPN – symmetric key distribution;
 - Remote Access VPN – public key distribution.
- Centralized management of cryptographic keys.
- Tunnelling protocol:
 - Encryption and encapsulation of IP traffic into UDP (L3 VPN);
 - Encryption and encapsulation of Ethernet frames into UDP (L2 VPN).
- Hardware acceleration of L2 and L3 VPN.
- Split tunneling.
- Client OS support:
 - Windows;
 - Linux;
 - MacOS;
 - Android;
 - iOS;
 - Aurora.

Resilience and load balancing

- Use of DOM and SSD memory modules.
- Automatic switch to stand by appliance.
- Security Cluster in High Availability mode with state synchronization.
- Unattended operation 24x7x365.
- Mean time between failures- 50 000 hours.