The mobilization of workforce has led to demand for anytime-anywhere access to network resources. This, along with increasing number of users like customers and partners connecting to an enterprise network from outside, and trends like rise in number of network users and devices, application explosion, virtualization, and more are leading to loss of security controls for enterprises over their networks. Cyberoam Next-Generation Firewalls (NGFW) with Layer 8 Identity-based technology offer actionable intelligence and controls to enterprises that allow complete security controls over L2-L8 for their future-ready security. Cyberoam’s Human Layer 8 acts like a standard abstract layer that binds with real Layers 2-7, enabling organizations to regain lost security controls.

Cyberoam CR500iNG-XP offers inline application inspection and control, website filtering, HTTPS inspection, Intrusion Prevention System, VPN (IPSec and SSL) and granular bandwidth controls. Additional security features like WAF, Gateway Anti-Virus, Anti-Spam are also available. The FleXi Ports (XP) available in CR500iNG-XP appliances offer flexible network connectivity with I/O slots that allow additional Copper/Fiber 1G/10G ports on the same security appliance.

**Interfaces**
- Maximum number of Available Ports: 24
- Fixed Copper GbE Ports: 8
- Number of Slots for FE/GE Ports Module: 2
- Port Options for FE/GE Ports Module: 8 / 8 / 4
- GNE Copper/Gige Fiber/TGIGE Fiber: 1
- Configurable Internal/DMZ/WAN Ports: Yes
- USB Ports: Hardware Bypass Segment: 2

**System Performance**
- Firewall Throughput (UDP): 18,000 Mbps
- Firewall Throughput (TCP): 16,000 Mbps
- New sessions/second: 100,000
- Concurrent sessions: 2,500,000
- IPSec VPN Throughput (Mbps): 1,500
- No. of IPSec Tunnels: 1,000
- SSL VPN Throughput (Mbps): 650
- WAF Protected Throughput (Mbps): 1,500
- Anti-Virus Throughput (Mbps): 3,500
- IPS Throughput (Mbps): 4,500
- NGFW Throughput (Mbps): 3,250
- Fully Protected Throughput (Mbps): 1,650

**Stateful Inspection Firewall**
- Layer 8 (User-Identity) Firewall
- Multiple Security Zones
- Access Control Criteria (ACC): User - Identity, Source and Destination Zone, MAC and IP address, Service
- Security policies - IPS, Web Filtering, Application Filtering, Anti-Virus, Anti-Spam and Bandwidth Management
- Application (Layer 7) Control and Visibility
- Access Scheduling
- Policy based Source and Destination NAT
- H.323, SIP NAT Traversal
- 802.1q VLAN Support
- DoS and DDoS Attack prevention
- MAC and IP-MAC filtering and Spoof prevention

**Application Filtering**
- Inbuilt Application Category Database
- 2,000+ Applications Supported
- Schedule-based access control
- Block
- Proxy and Tunnel
- File Transfer
- Social Networking
- Streaming Media
- Layer 7 (Applications) & Layer 8 (User-Identity) Visibility
- Securing SCADA Networks
- SCADA/ICS Signature-based Filtering for Protocols
- Modbus, DNSP, IEIC, Bacnet, Omron FINS, Secure DNSP, Longtalk
- Control various Commands and Functions

**Intrusion Prevention System (IPS)**
- Signatures: Default (4500+), Custom
- IPS Policies: Multiple
- User-based policy creation
- Automatic real-time updates from CRProtect networks
- Protocol Anomaly Detection
- DDoS attack prevention
- SCADA-aware IPS with pre-defined category for ICS and SCADA signatures

**User Identity and Group Based Controls**
- Access time restriction
- Time and Data Quota restriction
- Schedule-based Customized and Burstable Bandwidth
- Schedule-based P2P and IM Controls

**Administration and System Management**
- Web-based configuration wizard
- Role-based access control
- Firmware Updates via Web UI
- Web 2.0 compliant UI (HTTPS)
- UI Color Styler
- Command Line Interface (Serial, SSH, Telnet)
- SNMP (v1, v2, v3)
- Multi-lingual support: English, Chinese, Hindi, French, Japanese
- Cyberoam Central Console (Optional)
- Network Time Protocol Support

**User Authentication**
- Internal database
- Active Directory Integration
- Automatic Windows Single Sign On
- External LDAP/RADIUS database integration
- Thin Client support - Microsoft Windows Server 2003/2008

**Specifications**
- Terminal Services and Citrix XenApp - Novell eDirectory
- RSA SecurID support
- External Authentication - Users and Administrators
- User/MAC Binding
- Multi-Authentication servers

**Logging and Monitoring**
- Graphical real-time and historical monitoring
- Email notification of reports, gateway status, viruses and attacks
- Syslog support
- Log Viewer - Firewall, IPS, Web filter, WAF, Anti-Virus, Anti-Spam, Authentication, System and Admin Events

**On-Appliance Cyberoam-View Reporting**
- Integrated Web-based Reporting tool - Cyberoam-View
- 1200+ drilldown reports
- 45+ Compliance Reports
- Historical and Real-time reports
- Multiple Dashboards
- Username, Host, Email ID specific Monitoring Dashboard
- Reports - Security, Virus, Spam, Traffic, VPN, Search engine keywords
- Multi-format reports - tabular, graphical
- Exportable formats - PDF, Excel
- Automated Report Scheduling

**Virtual Private Network**
- IPSec, L2TP, PPTP
- Encryption - 3DES, DES, AES, Twofish, Blowfish
- Serpent
- Hash Algorithms - MDS, SHA-1
- Authentication - Preshared key, Digital certificates
- IPSec NAT Traversal
- Dead peer detection and FPS support
- Diffie Hellman Groups - 1, 2, 5, 16
- External Certificate Authority support
- Export Route Warrior connection configuration
- Domain name support for tunnel end points
- VPN connection redundancy
- Overlapping Network support
- Hub and Spoke VPN support

**SSL VPN**
- TCP and UDP Tunneling
- Authentication - Active Directory, LDAP, RADIUS, Cyberoam (Local)
- Multi-layered Client Authentication - Certificate, Username/Password
- Custom block messages per category
- Block Java Applets, Cookies, Active X
- CIPA Compliant
- Data leakage control via HTTP, HTTPS upload

**Bandwidth Management**
- Application and User Identity based Bandwidth Management
- Guaranteed and Burstable bandwidth policy
- Application and User Identity based Traffic Discovery
- Multi WAN bandwidth reporting
- Category-based bandwidth restriction

**Web Application Firewall**
- Positive Protection model
- Unique "Intuitive Website Flow Detector" technology
- Protection against SSL Injections, Cross-site Scripting (XSS), Session Hijacking, URL Tampering, Cookie Poisoning, etc
- Support for HTTP 0.9/1.0/1.1

**Gateway Anti-Virus & Anti-Spyware**
- Virus, Worm, Trojan, Detection and Removal
- Spyware, Malware, Phishing protection
- Automatic virus signature database update
- Scans HTTP, FTP, SMTP, SPOP, IMAP, IM, VPN Tunnels
- Customize individual user scanning
- Self Service Quarantine area
- Scan and deliver by file size
- Block by file types
- Add disclaimer/signature

**Gateway Anti-Spam**
- Inbound/Outbound Scanning
- Real-time Blacklist (RBL), MIME header check
- Filter based on message header, size, sender, recipient
- Subject line tagging
- IP address Black list/White list
- Redirect Spam mail to dedicated email address
- Image-based Spam filtering using RPD Technology
- Zero hour Virus Outbreak Protection
- Self Service Quarantine area
- Scan and Deliver through Digest
- IP Reputation-based Spam filtering

**Wireless WAN**
- USB port 3G/4G and Winmax Support
- Primary WAN link
- WAN Backup link

**Networking**
- Firewall - Automated Failover/Failback, Multi-WAN
- Failover, 3G/4G Modem Failover
- WRR based load balancing
- Policy routing based on Application and User
- IP Address Assignment - Static, PPPoE, L2TP, PPTP & DDNS Client, Proxy ARP, DHCP server, DHCP relay
- Support for HTTPS proxy
- Dynamic Routing: RIP v1 and v2, OSPF, BGP, Multicast forwarding
- Parent Proxy support for FGDN
- "IPv6 Ready" Gold Logo

**High Availability**
- Active-Active
- Active-Passive with State Synchronization
- Stateful failover
- Alerts on appliance status change

**IPSec VPN Client**
- Interoperability with major IPSec VPN Gateways
- Import Connection configuration

**Certification**
- Common Criteria - EAL4+
- ICSA Firewall - Corporate
- Checkmark Certification
- VPNC - Basic and AES interoperability
- "IPv6 Ready" Gold Logo

**Hardware Specifications**
- Memory: 4GB
- Compact Flash: 4GB
- HDD: 250GB or higher

**Compliance**
- CE
- FCC
- UL

**Dimensions**
- H x W x D (inches): 17.44 x 18.75 x 4.4
- H x W x D (cm): 44.3 x 47.62 x 11.24
- Weight: 5.1 kg

**Power**
- Input Voltage: 100-240 VAC
- Consumption: 206W

**Environmental**
- Operating Temperature: 0 to 40 °C
- Storage Temperature: 0 to 70 °C
- Relative Humidity (Non condensing): 10 to 90%