

# Future-ready

Tech Sheet

# Future-ready Security for SOHO/ROBO, SME and Large Enterprise networks

With high-speed Internet becoming a reality in organizations along with rising number of devices per user and data usage increasing at exponential rates, the next-generation security appliances must match the needs of future networks. Cyberoam NG series delivers future-ready security to organizations by offering unmatched throughput speeds with its best-in-class hardware along with software to match.

#### NG series for SOHO and SMEs:

The NG series appliances for SOHO, SMEs are the "fastest UTMs" made for this segment.

#### NG Series for Large Enterprises:

The NG series appliances for enterprises offer "Next-Generation Firewall (NGFW)" protection to large enterprises with NGFW capabilities offering high performance required for future enterprise networks.

With Cyberoam NG series, businesses get assured Security, Connectivity and Productivity. The Layer 8 Technology attaches User-Identity to security, adding speed to an organization's security. Cyberoam's Extensible Security Architecture (ESA) supports feature enhancements that can be developed rapidly and deployed with minimum efforts.



Cyberoam NG Series: 15iNG, 25iNG, 25iNG-6P, 35iNG, 50iNG, 100iNG, 2500iNG Cyberoam NG Wireless series: 15wiNG, 25wiNG, 25wiNG-6P, 35wiNG

# **Feature Specifications**

#### 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
- UTM policies IPS, Web Filtering, Application Filtering, Anti-virus, Anti-spam and Bandwidth Management
- Application (Layer 7) Control and Visibility Access Scheduling

- 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

## Gateway Anti-Virus & Anti-Spyware

- Virus, Worm, Trojan Detection and Removal Spyware, Malware, Phishing protection
- Automatic virus signature database update Scans HTTP, HTTPS, FTP, SMTP, POP3, 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

- Tilter blacking (NbL), mind fleader crieck Filter based on message header, size, sender, recipient Subject line tagging Redirect spam mails to dedicated email address Image-spam filtering using RPD Technology Zero hour Virus Outbreak Protection
- Self Service Quarantine area IP address Black list/White list
- Spam Notification through Digest<sup>2</sup>
- IP Reputation-based Spam filtering

# Intrusion Prevention System

- Signatures: Default (4500+), Custom IPS Policies: Multiple, Custom

- User-based policy creation Automatic real-time updates from CRProtect networks
- Protocol Anomaly Detection DDoS attack prevention

#### Web Filtering

- Inbuilt Web Category Database
   URL, keyword, File type block
   Web Categories: Default(82+), Custom
   Protocols supported: HTTP, HTTPS
- Block Malware, Phishing, Pharming URLs
  Category-based Bandwidth allocation and prioritization
- Block Java Applets, Cookies, Active X
- CIPA Compliant
- Data leakage control via HTTP, HTTPS upload Schedule-based access control
- Custom block messages per category

## Application Filtering

- Inbuilt Application Category Database
- 11+ Application Categories e.g. Gaming, IM, P2P, Proxy Schedule-based access control

- P2P applications e.g. Skype
- Anonymous proxies e.g. Ultra surf "Phone home" activities
  - Kevlogger
- Layer 7 (Applications) & Layer 8 (User Identity) Visibility

#### Web Application Firewall<sup>5</sup>

- Positive Protection model
   Unique "Intuitive Website Flow Detector" technology
- Onlique Intuitive Website Prov Detection technology
   Protection against SQL Injections, Cross-site Scripting (XSS),
   Session Hijacking, URL Tampering, Cookie Poisoning etc.
   Support for HTTP 0.9/1.0/1.1
   Back-end servers supported: 5 to 200 servers

# Virtual Private Network

- IPSec, L2TR, PPTP
   Encryption 3DES, DES, AES, Twofish, Blowfish, Serpent
   Hash Algorithms MD5, SHA-1
   Authentication: Preshared key, Digital certificates
   IPSec NAT Traversal

- Dead peer detection and PFS support
   Diffie Hellman Groups 1,2,5,14,15,16
   External Certificate Authority support
   Export Road Warrior connection configuration
- Domain name support for tunnel end points
   VPN connection redundancy
- Overlapping Network support
   Hub & Spoke VPN support

#### SSL VPN

- TCP & UDP Tunneling
  Authentication Active Directory, LDAP, RADIUS, Cyberoam (Local)
- Multi-layered Client Authentication Certificate, Username/Password

- User & Group policy enforcement
   Network access Split and Full tunneling
   Browser-based (Portal) Access Clientless access
   Lightweight SSL VPN Tunneling Client

- Granular access control to all the enterprise network resources
   Administrative controls Session timeout, Dead Peer Detection, Portal customization
- TCP-based Application Access HTTP, HTTPS, RDP, TELNET, SSH

#### Instant Messaging (IM) Management

- Yahoo and Windows Live Messenger
   Virus Scanning for IM traffic
- Allow/Block: Login, File Transfer, Webcam, One-to-one/group Chat Content-based blocking
- IM activities Log Archive files transferred
- Custom Alerts

## Wireless WAN

- USB port 3G/4G and WiMax Support
- Primary WAN link
   WAN Backup link

- **Bandwidth Management**
- Application and User Identity based Bandwidth Management
- Category-based Bandwidth restriction
   Guaranteed & Burstable bandwidth policy
- Application & User Identity based Traffic Discovery<sup>4</sup>
   Multi WAN bandwidth reporting

#### **User Identity-based and Group-based Controls**

- Access time restriction Time and Data Quota restriction, P2P and IM Controls
- Schedule-based Committed and Burstable Bandwidth

### Networking

- Automated Failover/Failback, Multi-WAN WRR based Load balancing

- WKK Dased Load Dalancing
   Policy routing based on Application and User
   IP Address Assignment Static, PPPoE, L2TP, PPTP & DDNS Client,
   Proxy ARP, DHCP server, DHCP relay
   Supports HTTP Proxy, Parent Proxy with FQDN
   Dynamic Routing: RIP v1& v2, OSPF, BGP, Multicast Forwarding

- High Availability
- Active-Active Active-Passive with state synchronization
- Stateful Failover - Alerts on Appliance Status change

# **Administration and System Management**

- Web-based configuration wizard
   Role-based Access control
- Firmware Upgrades via Web UI Web 2.0 compliant UI (HTTPS)
- UI Color Styler
- Command line interface (Serial, SSH, Telnet)
- Multi-lingual support: Chinese, Hindi, French, Korean Cyberoam Central Console (Optional)
- NTP Support

# **User Authentication**

- User Authentication
   Internal database
   Active Directory Integration
   Automatic Windows Single Sign On
   External LDAP/RADIUS database Integration
   Thin Client support Microsoft Windows Server 2003 Terminal Services and Citrix XenApp
   RSA SecurID support

- External Authentication Users and Administrators
- User/MAC Binding Multiple Authentication servers

# **Logging and Monitoring**

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

- On-Appliance Cyberoam iView Reporting<sup>5</sup>
- Integrated Web-based Reporting tool -Cyberoam-iView 1000 + drilldown reports
- 45 + Compliance reports
  Historical and Real-time reports
- Multiple Dashboards Username, Host, Email ID specific Monitoring Dashboard

LVIEW

- Reports Security, Spam, Virus, Traffic, Policy violations, VPN, Search Engine keywords
- Multi-format reports tabular, graphical
   Exportable formats PDF, Excel
   Automated Report Scheduling

- IPSec VPN Client<sup>6</sup>
- Inter-operability with major IPSec VPN Gateways Supported platforms: Windows 2000, WinXP 32/64-bit, Windows 2003 32-bit, Windows 2008 32/64-bit, Windows Vista 32/64
  - bit, Windows 7 RC1 32/64-bit, Windows 8 RC1 32/64-bit Import Connection configuration

- Certification
- ICSA Firewall Corporate Checkmark UTM Level 5 Certification
- VPNC Basic and AES interoperability
   IPv6 Ready Gold Logo
- 1,2,3,4,5, ## Available in all the Models except CR15iNG & CR15wiNG
- <sup>6</sup>Additional Purchase Required Not supported in CR15iNG & WiFi series of appliances
- Inbound and Outbound Spam filtering cannot be used simultaneously

| Techsheet                            |                   |                   |                   |                                  |                            | NG Future-read   |
|--------------------------------------|-------------------|-------------------|-------------------|----------------------------------|----------------------------|------------------|
| Specifications                       | 15iNG             | 25iNG/6P          | 35iNG             | 15wiNG                           | 25wiNG/6P                  | 35wiNG           |
| Interfaces                           |                   |                   |                   |                                  |                            |                  |
| Copper GbE Ports                     | 3                 | 4/6               | 6                 | 3                                | 4/6                        | 6                |
| Console Ports (RJ45)                 | 1                 | 1                 | 1                 | 1                                | 1                          | 1                |
| USB Ports                            | 2                 | 2                 | 2                 | 2                                | 2                          | 2                |
| Hardware Bypass Segments*            | -                 | -                 | _                 | -                                | -                          | -                |
| Configurable Internal/DMZ/WAN Ports  | Yes               | Yes               | Yes               | Yes                              | Yes                        | Yes              |
| System Performance*                  |                   |                   |                   |                                  |                            |                  |
| Firewall Throughput (UDP) (Mbps)     | 1,000             | 1,500             | 2,300             | 1,000                            | 1,500                      | 2,300            |
| Firewall Throughput (TCP) (Mbps)     | 750               | 1,000             | 2,000             | 750                              | 1,000                      | 2,000            |
| New sessions/second                  | 3,500             | 5,000             | 12,000            | 3,500                            | 5,000                      | 12,000           |
| Concurrent sessions                  | 60,000            | 150,000           | 350,000           | 60,000                           | 150,000                    | 350,000          |
| IPSec VPN Throughput (Mbps)          |                   |                   |                   |                                  |                            |                  |
| No. of IPSec Tunnels                 | 110<br>50         | 210<br>100        | 250<br>150        | 110<br>50                        | 210<br>100                 | 250<br>150       |
| SSL VPN Throughput (Mbps)            | 50                |                   | 100               | 50                               |                            | 100              |
| WAF Protected Throughput (Mbps)      | -NA-              | 75                |                   | -NA-                             | 75                         |                  |
| Anti-Virus Throughput (Mbps)         | -NA-<br>180       | 45                | 65                |                                  | 45                         | 65               |
| IPS Throughput (Mbps)                |                   | 300               | 525               | 180                              | 300                        | 525              |
| UTM Throughput (Mbps)                | 140               | 200               | 350               | 140                              | 200                        | 350              |
| Authenticated Users/Nodes            | 80                | 110               | 210               | 80                               | 110                        | 210              |
| Authenticated Osers/Nodes            | Unlimited         | Unlimited         | Unlimited         | Unlimited                        | Unlimited                  | Unlimited        |
| Built-in Wireless LAN (Only for wiNe | G series)         |                   |                   |                                  |                            |                  |
| Wireless Standards                   |                   |                   |                   | IEEE 802.11 a/b/g/n (WEP, WP.    | A, WPA2, 802.11i , TKIP, A | ES, PSK)         |
| Antenna                              |                   |                   |                   | Detachable 3x3 MIMO              |                            |                  |
| Access Points                        |                   |                   |                   | Up to 8 bssid                    |                            |                  |
| Transmit Power (EIRP)                |                   | . N               |                   | 11n HT40 : +15dBm, 11b CCh       | K: +15dBm, 11a OFDM:+      | -15dBm           |
| Receiver Sensitivity                 |                   | NA                |                   | -68dBm at 300Mbps, -70dBm        |                            |                  |
| Frequency Range                      |                   |                   |                   | 2.412 GHz - 2.472 GHz            | at o mispo, oddbin at or   | Mopo             |
| rrequericy riange                    |                   |                   |                   | 5.200 GHz - 5.825 GHz            |                            |                  |
| Number of Selectable Channels        |                   |                   |                   |                                  | (ETQI) / Japan (TELEC)     | 12 channola      |
|                                      |                   |                   |                   | USA (FCC) - 11 channels, EU      |                            | 13 CHAITHEIS     |
| Data Rate                            |                   |                   |                   | 802.11n: up to 450Mbps, 802.     |                            |                  |
| Dimensions                           |                   |                   |                   | 802.11g: 6, 9, 12, 18, 24, 36, 4 | 8, 54Mbps                  |                  |
| H x W x D (inches)                   | 1.7 x 6 x 9.1                    | 1.7 x 6 x 9.1              | 1.7 x 6 x 9.1    |
| H x W x D (cms)                      | 4.4 x 15.3 x 23.2                | 4.4 x 15.3 x 23.2          | 4.4 x 15.3 x 23. |
| Appliance Weight                     | 1.5 kg, 3.307 lbs | 2.3 kg, 5.07 lbs  | 2.3 kg, 5.07 lbs  |                                  | 2.3 kg, 5.07 lbs           |                  |
|                                      | 1.5 kg, 5.507 lb5 | 2.3 kg, 5.07 lbs  | 2.5 kg, 5.07 lbs  | 1.5 kg, 3.307 lbs                | 2.5 kg, 5.07 lbs           | 2.3 kg, 5.07 lbs |
| Power                                |                   |                   |                   |                                  |                            |                  |
| Input Voltage                        | 100-240VAC        | 100-240VAC        | 100-240VAC        | 100-240VAC                       | 100-240VAC                 | 100-240VAC       |
| Consumption                          | 13.2W             | 33.5W             | 47.8W             | 13.2W                            | 33.5W                      | 47.8W            |
| Total Heat Dissipation (BTU)         | 45                | 114               | 163               | 45                               | 114                        | 163              |
| Redundant Power Supply               | -                 | -                 | -                 | -                                | -                          | -                |
| Specifications                       | 50iNG             | 100iNG            | 2500iNG           |                                  |                            |                  |
| Interfaces                           |                   |                   |                   |                                  |                            |                  |
| Copper GbE Ports                     | 8                 | 8                 | 14                |                                  |                            |                  |
| 1GbE SFP (Mini GBIC) Ports           | 0                 | 0                 | 4                 |                                  |                            |                  |
| 10GbE SFP (Mini GBIC) Ports          | -                 | -                 | 2                 |                                  |                            |                  |
| Console Ports (RJ45)                 | -<br>1            | 1                 | 1                 |                                  |                            |                  |
| USB Ports                            | 2                 | 2                 | 2                 |                                  |                            |                  |
|                                      | 2                 | 2                 | 2                 |                                  |                            |                  |
| Hardware Bypass Segments*            | Yes               | Yes               | Yes               |                                  |                            |                  |
| Configurable Internal/DMZ/WAN Ports  | 162               | 162               | 162               |                                  |                            |                  |
| System Performance*                  |                   |                   |                   |                                  |                            |                  |
| Firewall Throughput (UDP) (Mbps)     | 3,250             | 4,500             | 36,000            |                                  |                            |                  |
| Firewall Throughput (TCP) (Mbps)     | 3,000             | 3,500             | 28,000            |                                  |                            |                  |
| New sessions/second                  | 30,000            | 45,000            | 200,000           |                                  |                            |                  |
| Concurrent sessions                  | 1,000,000         | 1,250,000         | 3,500,000         |                                  |                            |                  |
| IPSec VPN Throughput (Mbps)          | 400               | 450               | 8,000             |                                  |                            |                  |
| No. of IPSec Tunnels                 | 200               | 250               | 3,000             |                                  |                            |                  |
| SSL VPN Throughput (Mbps)            | 300               | 400               | 1,000             |                                  |                            |                  |
| WAF Protected Throughput (Mbps)      | 300               | 500               | 1,000             |                                  |                            |                  |
| Anti-Virus Throughput (Mbps)         | 1,000             | 1,400             | 6,000             |                                  |                            |                  |
| IPS Throughput (Mbps)                | 750               | 1,200             | 6,000             |                                  |                            |                  |
| UTM Throughput (Mbps)                | 550               | 750               | 4,000             |                                  |                            |                  |
| Authenticated Users/Nodes            | Unlimited         | Unlimited         | Unlimited         |                                  |                            |                  |
| Dimensions                           |                   | 5                 | J                 |                                  |                            |                  |
|                                      |                   |                   |                   |                                  |                            |                  |
| H x W x D (inches)                   | 1.7 x 14.6 x 17.3 | 1.7 x 14.6 x 17.3 | 3.54 x 17.52 x 23 | 3.23                             |                            |                  |
| H x W x D (cms)                      | 4.4 X 37.2 X 44   | 4.4 X 37.2 X 44   | 9 x 44.5 x 59     |                                  |                            |                  |
| Appliance Weight                     | 5 kg, 11.02 lbs   | 5 kg, 11.02 lbs   | 19 kg, 41.8 lbs   |                                  |                            |                  |
| Power                                |                   |                   |                   |                                  |                            |                  |
| Input Voltage                        | 100-240VAC        | 100-240VAC        | 90-260VAC         |                                  |                            |                  |
| Consumption                          | 99W               | 99W               | 258W              |                                  |                            |                  |
| Total Heat Dissipation (BTU)         | 338               | 338               | 881               |                                  |                            |                  |
| Redundant Power Supply               | 300               | 555               | Yes               |                                  |                            |                  |

Redundant Power Supply

Environmental Conditions: Operating Temperature 0 °C to 40 °C, Storage Temperature -25 °C to 75 °C, Relative Humidity (Non condensing) 10% to 90% °lf Enabled, will bypass traffic only in case of Power failure. \*Antivirus, IPS and UTM performance is measured based on HTTP traffic as per RFC 3511 guidelines. Actual performance may vary depending on the real network traffic environments.

# Toll Free Numbers

**USA**: +1-800-686-2360 | **India**: 1-800-301-00013

**APAC/MEA**: +1-877-777-0368 | **Europe**: +44-808-120-3958

