Cyberoam
A SOPHOS Company

NG CR50iNG Future-ready

Future-ready Security for SME networks | CR50iNG

Data Sheet

Cyberoam NG series of Unified Threat Management appliances are the Next-Generation network security appliances that include UTM security features along with performance required for future networks. The NG series for SMEs are the "fastest UTMs" made for this segment. The best-in-class hardware along with software to match, enables the NG series to offer unmatched throughput speeds, compared to any other UTM appliance in this market segment. This assures support for future IT trends in organizations like high-speed Internet and rising number of devices in organizations – offering future-ready security to SMEs.

With Cyberoam NG series, businesses get assured Security, Connectivity and Productivity. The Layer 8 Technology treats User-Identity as the 8th Layer or the HUMAN layer in the protocol stack. It attaches User-Identity to security, which adds speed to an organization's security by offering instant visibility into the source of attacks by username rather than only IP address. Cyberoam's Extensible Security Architecture (ESA) supports feature enhancements that can be developed rapidly and deployed with minimum efforts, offering future-ready security to organizations.

The 'Next-Generation' Series:
The fastest UTMs made for SMEs

Cyberoam's Layer 8 Technology treats "User Identity" as the 8th Layer in the protocol stack

L8	USER	
L7	Application	
L6	Presentation	ASCII, EBCDIC, ICA
L5	Session	L2TP, PPTP
L4	Transport	TCP, UDP
L3	Network	192.168.1.1
L2	Data Link	00-17-BB-8C-E3-E7
L1	Physical	

Cyberoam UTM offers security across Layer 2-Layer 8 using Identity-based policies

Cyberoam UTM features assure Security, Connectivity, Productivity

Security

Network Security
- Firewall
- Intrusion Prevention System
- Web Application Firewall

Content Security
- Anti-Virus/Anti-Spyware
- Anti-Spam (Inbound/Outbound)
- HTTPS/SSL Content Security

Administrative Security
- Next-Gen UI
- iView- Logging & Reporting

Connectivity

Business Continuity
- Multiple Link Management
- High Availability

Network Availability
- VPN
- 3G/4G/WiMAX Connectivity

Future-ready Connectivity
- "IPv6 Ready" Gold Logo

Productivity

Employee Productivity
- Content Filtering
- Instant Messaging Archiving & Controls

IT Resource Optimization
- Bandwidth Management
- Traffic Discovery
- Application Visibility & Control

Administrator Productivity
- Next-Gen UI

Specification

Interfaces

Copper GbE Ports	8
Configurable Internal/DMZ/WAN Ports	Yes
Console Ports (Rj45)	1
USB Ports	2
Hardware Bypass Segment#	2

System Performance*

Firewall Throughput (UDP) (Mbps)	3,250
Firewall Throughput (TCP) (Mbps)	3,000
New sessions/second	30,000
Concurrent sessions	1,000,000
IPSec VPN Throughput (Mbps)	400
No. of IPSec Tunnels	200
SSL VPN Throughput (Mbps)	300
WAF Protected Throughput (Mbps)	300
Anti-Virus Throughput (Mbps)	1,000
IPS Throughput (Mbps)	750
UTM Throughput (Mbps)	550

Stateful Inspection Firewall

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

Gateway Anti-Virus & Anti-Spyware

- Virus, Worm, Trojan: Detection & 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
- Filter based on message header, size, sender, recipient
- Subject line tagging
- IP address Black list/White list
- Redirect Spam mails to dedicated email address
- Image-based Spam filtering using RPD Technology
- Zero hour Virus Outbreak Protection
- Self Service Quarantine area
- Spam Notification through Digest
- 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
- SCADA-aware IPS with pre-defined category for ICS and SCADA signatures

Web Filtering

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

Application Filtering

- Inbuilt Application Category Database
- 2,000+ Applications Supported
- Schedule-based access control
- Block
  - Proxy and Tunnel
  - File Transfer
  - Social Networking
  - Streaming Media
  - Storage and Backup
- Layer 7 (Applications) & Layer 8 (User - Identity) Visibility
- Securing SCADA Networks
  - SCADA/ICS Signature-based Filtering for Protocols
  - Modbus, DNP3, IEC, Bacnet, Omron FINS, Secure DNP3, Longtalk
  - Control various Commands and Functions

Web Application Firewall

- Positive Protection model
- Unique "Intuitive Website Flow Detector" technology
- Protection against SQL Injections, Cross-site Scripting (XSS), Session Hijacking, URL Tampering, Cookie Poisoning
- Support for HTTP 0.9/1.0/1.1
- Extensive Logging & Reporting

Virtual Private Network

- IPSec, L2TP, 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
- 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
- Allow/Block File Transfer
- Allow/Block Webcam
- Allow/Block 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
- Guaranteed & Burstable bandwidth policy
- Application & User Identity based Traffic Discovery
- Multi WAN bandwidth reporting
- Category-based bandwidth restriction

User Identity and Group Based Controls

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

Networking

- Failover - Automated Failover/Failback, Multi-WAN failover, 3GModem 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 HTTP Proxy
- Dynamic Routing: RIP v1& v2, OSPF, BGP, Multicast Forwarding
- Parent Proxy support with FQDN
- "IPv6 Ready" Gold Logo

High Availability

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

Administration & 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)
- SNMP (v1, v2c, v3)
- Multi-lingual support: Chinese, Hindi, French, Korean
- 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 Terminal Services and Citrix XenApp - Novell eDirectory
- RSA SecurID support
- External Authentication - Users and Administrators
- User/MAC Binding
- Multiple Authentication servers

Logging/Monitoring

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

On-Appliance Cyberoam-iView Reporting

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

IPSec VPN Client**

- 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
- Import Connection configuration

Certification

- Common Criteria - EAL4+
- ICSA Firewall - Corporate
- Checkmark UTM Level 5 Certification
- VPNC - Basic and AES interoperability
- "IPv6 Ready" Gold Logo

Hardware Specifications

Memory	2GB
Compact Flash	4GB
HDD	250GB or higher

Compliance

CE
FCC
UL

Dimensions

H x W x D (inches)	1.7 x 14.6 x 17.3
H x W x D (cms)	4.4 X 37.2 X 44
Weight	5 kg, 11.02 lbs

Power

Input Voltage	100-240 VAC
Consumption	99W
Total Heat Dissipation (BTU)	338

Environmental

Operating Temperature	0 to 40 °C
Storage Temperature	-25 to 75 °C
Relative Humidity (Non condensing)	10 to 90%

#If Enabled, will bypass traffic only in case of power failure. **Additional Purchase Required.

*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.

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