

Techsheet - Cyberoam Product Range



Tech Sheet



Cyberoam offers Next-Generation security along with high performance to SOHO, SMEs and Enterprise networks with its Next-Generation Firewalls and UTM appliances. Cyberoam moves beyond offering comprehensive network security to simplify security management for organizations with multiple offices with its centralized security management solution, Cyberoam Central Console (CCC), and its centralized visibility solution, Cyberoam iView. These future-ready security solutions are available for both physical and virtual networks.

Cyberoam Products Portfolio











Cyberoam Central Console (CCC)

CR iView (Logging & Reporting)

Cyberoam Network Security Appliances

CyberoamOS

he Security-Hardened Operating System

- Extensible Security Architecture
 Agility to prolong the life and performance of its NGFW appliances
- Supports newer enterprise security features and enhancements

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

Intrusion Prevention System

- IPS Policies: Multiple, Custom
- User-based policy creation
 SCADA-aware IPS with pre-defined category for ICS and SCADA signatures

- Web Filtering
 On-Cloud Web Categorization
- Web Categories: Default(89+), Custom Protocols supported: HTTP, HTTPS

- Application Filtering
 Layer 7 (Applications) & Layer 8 (User Identity) Visibility
 Control over 2,000+ Applications, classified in 21 Categories
 Filter based selection: Category, Risk Level, Characteristics and Filter based selection: Category, Risk Level, Characteris Technology
 Securing SCADA Networks
 - SCADA/ICS Signature-based Filtering for Protocols
 - Modbus, DNP3, IEC, Bacnet etc
 - Control various Commands and Functions

Web Application Firewall¹

- Positive Protection model
- Unique "Intuitive Website Flow Detector" technology
 Protection against SQL Injections, Cross-site Scripting (XSS),
- Session Hijacking, URL Tampering, Cookie Poisoning etc

High Availability

- Active-Active and Active-Passive
- Stateful Failover

Bandwidth Management

- Application and User Identity based Bandwidth Management Category-based Bandwidth restriction

- Networking Automated Failover/Failback, Multi-WAN
- WRR based Load balancing Dynamic Routing: RIP v1&v2, OSPF, BGP, PIM-SM, Multicast Forwarding

Wireless WAN

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

Virtual Private Network

- IPSec, L2TP, PPTP
 Encryption 3DES, DES, AES, Twofish, Blowfish, Serpent
 Authentication: Preshared key, Digital certificates

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 3 2/64bit, Windows 7 RC1 32/64-bit, Windows 8 RC1 32/64-bit

SSL VPN

- TCP & UDP Tunneling
- Authentication Active Directory, LDAP, RADIUS, Cyberoam
- TCP-based Application Access HTTP, HTTPS, RDP, TELNET, SSH

Administration and System Management

- Web-based configuration wizard
- · Command line interface (Serial, SSH, Telnet) SNMP (v1, v2c)
- **User Authentication**

- Internal database
- AD Integration with support for OU-based Security Policies
- Automatic Windows Single Sign On
- External LDAP/DAPS/RADIUS database Integration

On-Appliance Cyberoam - iView Reporting²

- Integrated Web-based Reporting tool 1,200+ drill-down reports
- Compliance reports HIPAA, GLBA, SOX, PCI, FISMA Historical and Real-time report
- Reports Application, Internet & Web Usage, Mail Usage, Attacks, Spam, Virus, Search Engine, User Threat Quotient (UTQ) for high risk users and more
- Supports 3rd party PSA Solution ConnectWise

Logging and Monitoring

- Graphical real-time and historical Monitoring
- Log Viewer IPS, Web filter, WAF, Anti-Virus, Anti-Spam, Authentication, System and Admin Events

Gateway Anti-Virus & Anti-Spyware Scans HTTP, HTTPS, FTP, SMTP/S, POP3, IMAP, IM, VPN Tunnels

Self Service Quarantine area³

Gateway Anti-Spam

- Inbound, Outbound Scanning⁴ Real-time Blacklist (RBL), MIME header check
- Self Service Quarantine area5

Certification

- Common Criteria EAL4+6 ICSA Firewall Corporate
- Checkmark UTM Level 5 Certification
 VPNC Basic and AES interoperability
- IPv6 Ready Gold Logo

Cyberoam Virtual Appliance advantages

- Supported Virtualization Platforms: VMware, Microsoft Hyper-V, KVM and Citrix XenServer
- Protects virtual data-centers, "Security-in-a-Box", and "Office-in-a-Box" set-ups
- Scans traffic within virtual networks, protecting hypervisor management console, hypervisor & Guest OS, securing zero trust

1,2,3,4,5 Available in all the Models except CR10iNG, CR10wiNG, CR15iNG & CR15wiNG

⁶Not applicable for CR10iNG and CR10wiNG Not supported in WiFi series of appliances ⁶Additional Purchase Required

Centralized Security Management with Cyberoam Central Console (CCC)

Centralized Remote Management

- Configure and Manage - Individual Appliances
- Appliance Groups
- Global Policy Enforcement - Firewall
- Web Filter
- Application Filter
- IPS
- Anti Virus, Anti Spam
- Network configuration
- OoS Policy
- Web Application Firewall

- VPN
- User, User Groups and Guest Users and more...

Configuration Management

- Template-based configuration
- Configuration Synchronization - Backup and Restore

- Appliance Monitoring & Alerts - Dashboard for Appliance Group, Individual Appliance
- Appliance Monitor Graph
- Email Alerts

Centralized logging

- Audit and System log

Upgrade Distribution Service

- Security Upgrades
 - AV. IPS & Application Signatures
 - Web Filtering Categories
- CyberoamOS Firmware Updates

Administration

- Role-based Granular control over
- Appliance and Appliance Groups - Health Monitoring: CCC, Managed Appliances

Communication

- Secure Encryption
- Mutual Authentication
- HTTP, HTTPS, Syslog & Secure Syslog

System Management

- Web Based User Interface
- Command Line Interface

Compliance - CE, FCC, UL, RoHS

- Logs & Reports Centralized Visibility across Networks with Cyberoam iView

- Logs - Real-time/Archived logs
- Log storage (Backup/restore)
- Audit logs Categories Mail, User, Device, Application, Views, Data, Archive, Report
- Reports
- 1,200+ drilldown Reports
- Compliance Reports HIPAA, SOX, FISMA, GLBA, PCI
- User and Group based Reports
- Internet Usage Reports Data Transfer, Surfing Time, Client Type
- Security Reports Firewall, Attacks, Spam, Virus, Blocked Attempts, WAF
- Remote Access Reports

Also available as Software

- Exportable formats PDF, Excel
- Email Alerts/automated Report Scheduling

Administration

- Web based Management Console
- Role-based administration
- Multiple Dashboards Resource, Device. User, Host, Email Address Device Grouping - Device type & models

Supported Web Browsers

- Microsoft Internet Explorer 8.0+

Operating Environment

- Hardened Linux OS

Supported Network and Security **Devices**

- Custom/Proprietary devices including UTMs
- Proxy Firewalls, Access Gateway - Smart Wireless Router
- Endpoint Security Solution

- Mozilla Firefox 3.0+ (Best view)
- Syslog-compatible devices



Specifications	10iNG	15iNG	25iNG/6P	35iNG	10wiNG	15wiNG	25wiNG/6P	35wiNG	
Interfaces									
Copper GbE Ports	3	3	4/6	6	3	3	4/6	6	
Console Ports (RJ45)	1	1	1	1	1	1	1	1	
USB Ports	2	2	2	2	2	2	2	2	
Hardware Bypass Segments*	-	-	-	-	-	-	-	-	
Configurable Internal/DMZ/WAN Por	tsYes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
System Performance									
Firewall Throughput (UDP) (Mbps)	400	1,200	1,800	3,700	400	1,200	1,800	3,700	
Firewall Throughput (TCP) (Mbps)	300	900	1,200	2,400	300	900	1,200	2,400	
New sessions/second	2,000	5,000	6,000	21,000	2,000	5,000	6,000	21,000	
Concurrent sessions	27,500	200,000	500,000	750,000	27,500	200,000	500,000	750,000	
IPSec VPN Throughput (Mbps)	100	130	210	280	100	130	210	280	
No. of IPSec Tunnels	25	300	550	850	25	300	550	850	
SSL VPN Throughput (Mbps)	25	50	75	100	25	50	75	100	
WAF Protected Throughput (Mbps)	-NA-	-NA-	100	150	-NA-	-NA-	100	150	
Anti-Virus Throughput (Mbps)	100	200	350	600	100	200	350	600	
IPS Throughput (Mbps)	90	160	240	650	90	160	240	650	
UTM Throughput (Mbps)	60	90	125	300	60	90	125	300	
Authenticated Users/Nodes	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	
Built-in Wireless LAN (Only f	or wiNG series)								
Wireless Standards		NA			IEEE 802.11 a/b/g/	n (WEP, WPA, WPA	2, 802.11i , TKIP, AE	S, PSK)	
Antenna		NA				Detachable 3x3 N	IIMO****		
Access Points						Up to 8 bss	id		
Dimensions									
H x W x D (inches)	1.35 x 8.75 x 6.8	1.7 x 6 x 9.1	1.7 x 6 x 9.1	1.7 x 6 x 9.1	1.35 x 8.75 x 6.8	1.7 x 6 x 9.1	1.7 x 6 x 9.1	1.7 x 6 x 9.1	
HxWxD (cms)	3.43 x 22.23 x 17.3	4.4 x 15.3 x 23.2	4.4 x 15.3 x 23.2	4.4 x 15.3 x 23.2	3.43 x 22.23 x 17.3	4.4 x 15.3 x 23.2	4.4 x 15.3 x 23.2	4.4 x 15.3 x 23	3.2
Appliance Weight	1.10 kg, 2.42 lbs	1.5 kg, 3.307 lbs	2.3 kg, 5.07 lbs	2.3 kg, 5.07 lbs	1.10 kg, 2.42 lbs	1.5 kg, 3.307 lbs	2.3 kg, 5.07 lbs	2.3 kg, 5.07 lb	S
Power									
Input Voltage	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC	
Consumption	22W	13.2W	33.5W	47.8W	22W	13.2W	33.5W	47.8W	
Total Heat Dissipation (BTU)	75	45	114	163	75	45	114	163	

[&]quot;Refer to the datasheet specific to your appliance for detailed specifications including Transmit Power, Receiver Sensitivity, Frequency Range, No. of Selectable Channels and Data Rate. "CR10wiNG comes with 2x2 MIMO.

Specifications	50iNG	100iNG	200iNG/XP	300iNG/XP
Interfaces				
Copper GbE Ports	8	8	10 / 6	10 / 6
Number of Slots for FleXi Ports Module	-	-	1	1
Port options per FleXi Ports Module*** (1 GbE Copper / 1 GbE SFP / 10 GbE SFP)	-	-	8 / 8 / 4	8 / 8 / 4
Console Ports (RJ45)	1	1	1	1
USB Ports	2	2	2	2
Hardware Bypass Segments*	2	2	2	2
Configurable Internal/DMZ/WAN Ports	Yes	Yes	Yes	Yes
System Performance				
Firewall Throughput (UDP) (Mbps)	6,500	8,000	10,000/14,000	12,000/21,000
Firewall Throughput (TCP) (Mbps)	4,000	5,000	8,000	9,500/10,500
New sessions/second	45,000	60,000	85,000	100,000
Concurrent sessions	1,000,000	3,000,000	3,200,000	3,200,000
IPSec VPN Throughput (Mbps)	850	1,050	1,150	1,300
No. of IPSec Tunnels	2,000	4,000	4,500	5,000
SSL VPN Throughput (Mbps)	300	400	450	500
WAF Protected Throughput (Mbps)	450	700	1,000	1,250
Anti-Virus Throughput (Mbps)	1,500	2,200	2,600	2,900
IPS Throughput (Mbps)	1,600	2,500	3,000	4,000
UTM Throughput (Mbps)	850	1,050	1,400	1,700
Authenticated Users/Nodes	Unlimited	Unlimited	Unlimited	Unlimited
Dimensions				
H x W x D (inches)	1.7 x 14.6 x 17.3	1.7 x 14.6 x 17.3	1.7 x 17.3 x 11.85	1.7 x 17.3 x 11.85
H x W x D (cms)	4.4 X 37.2 X 44	4.4 X 37.2 X 44	4.4 x 43.9 x 30.1	4.4 x 43.9 x 30.1
Appliance Weight	5 kg, 11.02 lbs	5 kg, 11.02 lbs	5.1 kg, 11.24 lbs	5.1 kg, 11.24 lbs
Power				
Input Voltage	100-240VAC	100-240VAC	100-240VAC	100-240VAC
Consumption	99W	99W	137W	137W
Total Heat Dissipation (BTU)	338	338	467	467



Specifications	500iNG-XP	750iNG-XP	1000iNG-XP	1500iNG-XP	2500iNG-XP
Interfaces					
Copper GbE Ports	8	8	10	10	10
Number of Slots for FleXi Ports Module	2	2	4	4	4
Port options per FleXi Ports Module* (GbE Copper/GbE Fiber/10GbE Fiber)	8 / 8 / 4	8/8/4	8,4 / 8 / 4	8,4 / 8 / 4	8,4 / 8 / 4
Console Ports (RJ45)	1	1	1	1	1
USB Ports	2	2	2	2	2
Hardware Bypass Segments"	2	2	Yes*	Yes*	Yes*
Configurable Internal/DMZ/WAN Ports	Yes	Yes	Yes	Yes	Yes
System Performance ***					
Firewall Throughput (UDP) (Mbps)	25.000	28.500	120,000	140.000	160,000
Firewall Throughput (TCP) (Mbps)	18,000	20.000	45,000	60.000	70,000
New sessions/second	180,000	200,000	240,000	265,000	300,000
Concurrent sessions	4,500,000	6,400,000	13,000,000	15,000,000	20,000,000
IPSec VPN Throughput (Mbps)	3,200	4,200	5,000	8,000	10,000
No. of IPSec Tunnels	6,250	7,250	8,000	8,500	9,500
SSL VPN Throughput (Mbps)	650	750	850	1,050	1,450
WAF Protected Throughput (Mbps)	1,500	1,750	2,000	2,300	2,600
Anti-Virus Throughput (Mbps)	4,300	5,500	8,000	9,000	12,000
IPS Throughput (Mbps)	7,000	8,500	12,500	15,000	20,000
NGFW Throughput (Mbps)****	3,750	5,000	7,250	8,250	10,000
Fully Protected Throughput*****	3,000	4,000	5,800	6,750	8,250
Authenticated Users/Nodes	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Dimensions					
H x W x D (inches)	1.7 x 17.44 x 18.75	1.7 x 17.44 x 18.75	3.54 x 17.52 x 23.23	3.54 x 17.52 x 23.23	3.54 x 17.52 x 23.23
H x W x D (cms)	4.4 X 44.3 X 47.62	4.4 X 44.3 X 47.62	9 x 44.5 x 59	9 x 44.5 x 59	9 x 44.5 x 59
Appliance Weight	5.1 kg, 11.24 lbs	5.1 kg, 11.24 lbs	19kg, 41.8lbs	19 kg, 41.8 lbs	19 kg, 41.8 lbs
Appliance Weight	5.1 kg, 11.24 lbs	5.1 kg, 11.24 lb3	19kg, 41.0lb3	13 Ng, +1.0 lb3	10 Ng, 41.0 lb3
Power					
Input Voltage	100-240 VAC	100-240 VAC	90-260 VAC	90-260 VAC	90-260 VAC
Consumption	208 W	208 W	258 W	258 W	258 W
Total Heat Dissipation (BTU)	345	345	881	881	881
Redundant Power Supply	-	Yes	Yes	Yes	Yes

Environmental Conditions: Operating Temperature 0 °C to 40 °C, Storage Temperature -25 °C to 75 °C, Relative Humidity (Non condensing) 10% to 90% Additional Purchase required. "If Enabled, will bypass traffic only in case of Power failure.

Cyberoam Virtual Security Appliances



	CRiV-1C	CRiV-2C	CRiV-4C	CRiV-8C	CRiV-12C
Technical Specifications					
Hypervisor Support	VMware ESX/ESXi 4.0	/4.1/5.0, VMware Worksta	tion 7.0/8.0/9.0, VMware P	layer 4.0/5.0, Microsoft Hyp	per-V 2008/2012, KVM, Citrix XenServe
vCPU Support (Min / Max)	1 / 1	1/2	1 / 4	1/8	1 / 12
Network Interface Support (Min / Max*)	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10
Memory Support (Min / Max)	1 GB / 4 GB	1 GB / 4 GB	1 GB / 4 GB	1 GB / 4 GB	1 GB / 4 GB
System Performance*					
Firewall Throughput (UDP) (Mbps)	1,500	3,000	3,500	4,000	4,000
Firewall Throughput (TCP) (Mbps)	1,200	2,500	3,000	3,500	4,000
New sessions/second	25,000	30,000	40,000	50,000	60,000
Concurrent sessions	230,000	525,000	1,200,000	1,500,000	1,750,000
IPSec VPN Throughput (Mbps)	200	250	300	350	400
No. of IPSec Tunnels	200	1,000	1,500	2,000	2,500
SSL VPN Throughput (Mbps)	300	400	550	550	750
WAF Protected Throughput (Mbps)	300	500	800	1,400	1,550
Anti-Virus Throughput (Mbps)	900	1,500	2,000	2,200	2,450
IPS Throughput (Mbps)	450	750	1,200	1,800	1,900
Fully Protected Throughput** (Mbps)	250	450	1,000	1,400	1,550
Authenticated Users/Nodes	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

Actual performance may vary depending on the real network traffic environments. Performance values given above were observed using server with Intel Xeon E5645 (2.4 GHz) and E1000E Ethernet Drivers, running VMware version ESXi 5.0 (Update 1) with 4 GB vRAM assigned to CR Virtual Security Appliance.

"The Number depends on the Hypervisor you are using.

[&]quot;Antivirus, IPS and Fully Protected Throughput performance is measured based on HTTP traffic as per RFC 3511 guidelines. Actual performance may vary depending on the real network traffic environments. "NGFW throughput is measured with Firewall, IPS and Web & Application Filtering features turned on. "Filtering features turned on." "Filtering features turned on." "Need to purchase the FleXi Ports module with LAN Bypass (4-port 1 GbE Copper Module).

^{*}Antivirus, IPS and Fully Protected Throughput performance is measured based on HTTP traffic as per RFC 3511 guidelines. Actual performance may vary depending on the real network traffic environments. Fully Protected Throughput is measured with Firewall, IPS, Web & Application Filtering and Anti-Virus features turned on.



Hardware CCC Appliance	CCC15NM	CCC50NM	CCC100NM	CCC200NM	CCC500NM
Interfaces					
10/100/1000 RJ45 Ports	6	6	6	8	8
Console Ports (RJ45)	1	1	1	1	1
USB Ports	2	2	2	2	2
Dimensions					
H x W x D (inches)	1.7 x 17.3 x 11.85	1.7 x 17.3 x 11.85	1.7 x 17.3 x 11.85	1.7 x 17.44 x 18.75	1.7 x 17.44 x 18.75
HxWxD (cms)	4.4 x 43.9 x 30.1	4.4 x 43.9 x 30.1	4.4 x 43.9 x 30.1	4.4 X 44.3 X 47.62	4.4 X 44.3 X 47.62
Weight (lbs)	5.1 kg, 11.24 lbs	5.1 kg, 11.24 lbs			
Power					
Input Voltage	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC
Consumption	137W	137W	137W	208W	208W
Total Heat Dissipation (BTU)	467	467	467	345	345
Redundant Power Supply	-	-	-	Yes	Yes
Environmental	0 1 40 00	0 1 40 00	0 1 40 00	0.110.00	0.1.10.00
Operating Temperature	0 to 40 °C	0 to 40 °C			
Storage Temperature	0 to 70 °C	0 to 70 °C			
Relative Humidity (Non condensing)	10 to 90%	10 to 90%	10 to 90%	10 to 90%	10 to 90%
No of CD Appliances Supported	20	100	000	400	1 000
No. of CR Appliances Supported	30	100	200	400	1,000

Virtual CCC Appliance Range

Model	RAM	HDD	Interfaces	No. of CR Appliances Supported
CCCV15	2 GB	80 GB	4	15
CCCV50	4 GB	160 GB	4	50
CCCV100	4 GB	250 GB	4	100
CCCV200	4 GB	320 GB	4	200
CCCV500	4 GB	320 GB	4	500

Hypervisor Support: VMware ESX/ESXi 3.5/4.0/4.1/5.0, VMware Workstation 7.0/8.0/9.0, Microsoft Hyper-V 2008/2012

Cyberoam iView Appliances



Specifications	CR-iVU25NR	CR-iVU100NR	CR-iVU200NR
Interfaces			
Ethernet Ports (GbE)	4	6	6
Console Ports (RJ45)	1	1	1
USB Ports	2	1	1
CF Card (GB)	4	4	4
Number of Hard Drives	1 (1TB)	4 (2TB each)	4 (4TB each)
Total Available Storage	1TB	8TB	16TB
RAID Storage Management	-	RAID 5	RAID 5
Performance			
Events per Second (EPS)	500	1,250	1,750
Devices Supported (Max)	100	250	350
GB/day of logs (Max)	17	43	60
Average retention at 4GB logs/day	6 months	3.5 years	7 years
Dimensions			
HxWxD (inches)	1.72 x 10.83 x 17.32	3.46 x 16.7 x 20.9	3.46 x 16.7 x 20.9
HxWxD (cms)	4.4 x 27.5 x 44	8.8 x 42.4 x 53.1	8.8 x 42.4 x 53.1
Weight	3.78kg, 8.35lbs	16 kg, 36lbs	16 kg, 36lbs
Power			
Input Voltage	100-240 VAC	100-240 VAC	100-240 VAC
Consumption	65W	265W	265W
Total Heat Dissipation (BTU)	175	425	425
Environmental			
Operating Temperature	5 to 40 °C	5 to 40 °C	5 to 40 °C
Storage Temperature	20 to 70 °C	20 to 70 °C	20 to 70 °C
· .			
Relative Humidity (Non condensing)	20 to 70%	20 to 70%	20 to 70%

Toll Free Numbers

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