

## CONVERGED ACCESS POINT

### ALL-IN-ONE CONVERGED ACCESS DEVICE ASSURES IP QOS AND SECURITY WITH LOWEST TCO FOR SMB AND REMOTE OFFICES

- > The Converged Access Point (CAP) integrates best-of-breed traffic management, VoIP control, firewall and VPN security to offer premium application performance, security and low TCO for SMB and remote office environments. Key features include:
- Toll-quality VoIP, jitter-free video and business-class IP data performance
  - Precise per user application performance guarantees
  - WAN optimization with bandwidth utilization that can exceed 95%
  - Comprehensive VPN and firewall security that is application-aware
  - VoIP gateway support for legacy voice, fax and other analog devices
  - Integrated, secure 802.11 b/g Wi-Fi access
  - An integrated "all-in-one" small office solution reducing TCO by as much as 66%
  - Ease of integration with legacy and new voice/data applications and networks

## SOFTWARE FEATURES

### APPLICATION-AWARE PERFORMANCE MANAGEMENT

- Up to 10 classes of traffic
- Up to 5 levels of prioritization per class
- Bandwidth guarantees and Burst rates per class
- TCP Rate Shaping
- Class Based Queuing
- Integrated traffic classification and firewall rules by:
  - IP address, port, protocol, ToS/DiffServ
  - Layer 7 Application Layer Gateway (ALG)
- Inbound/Outbound asymmetric class definitions
- Bandwidth bursting and borrowing

### ADVANCED VOIP/VIDEO QOS FEATURES

- Type of service (ToS) marking/re-marking
- Packet Size Optimization (MTU setting)
- Codec aware, embedded bandwidth calculator
- Per VoIP class bandwidth guarantees
- Traffic reporting per class in:
  - Kbps, PPS, Total bytes and packets
  - Average Kbps (15 minute period)
- Inbound/Outbound traffic statistics
- Configured burst/guaranteed bandwidth per class

### MANAGED STATEFUL INSPECTION (SPI) FIREWALL

- ICSA 4.0 compliant
- DoS protection for
  - Winnuke, SYN flood, ICMP replay
  - Bad fragments, spoofed connections
- DMZ Host LAN end-point support
- Port Triggering

- Local or remote security administration
- Advanced filtering for more granular control
- Comprehensive security logging

### ALG (APPLICATION LAYER GATEWAY) FIREWALL

- Identifies specific application level flows
- Many (70) applications supported including:
  - VoIP, Chat, SIP, H323, MGCP, Net meeting

### INTEGRAL VPN

- Up to 25 simultaneous tunnels, 1000 flows
- VPNC compliant
- Interoperable with Microsoft, Cisco, and Checkpoint
- LAN-to-LAN, WLAN-to-LAN and Telecommuter-to-LAN
- PPTP, L2TP, IPSec (RFC 2401, 2411, 2412, 2393) protocols
- 3DES-CBC, DES-CBC or NULL encryption algorithms
- MD5 or SHA-1 for authentication.
- IKE, PKI or manual key exchange.
- Passthrough VPN: IPSEC, IKE ALG
- DES, 3DES and AES encryption
  - Hardware accelerator for DES, 3DES

### VOICE SERVICES

- Protocols supported
  - SIP (RFC 3261)
  - H.323 (ITU-T H.323 Version 4)
  - MGCP (2705bis02)
  - RTP/RCTP (RFC 1889/1890)

- Codecs supported
  - G.711 A-Law/  $\mu$ -Law
  - G.729a/b
  - G.723.1
- Telephony Features
  - Initiate basic call
  - Receive call
  - Caller ID
  - Call on hold
  - Call transfer
  - Three way calling
  - In-call DTMF relays
  - Single POTS line fail-over
  - Standard 911 services accessible

### ROUTING

- Static routing, default routes
- Dynamic Routing
- RIP1 (RFC 1058), RIP2 (RFC 1389), IGMP
- DNS Server/Relay Function
- DHCP Server/Relay: LAN Hosts/DHCP client
- PPP over Ethernet (PPoE) (RFC 2516)
- IP Address Translation:
  - NAT pass-through
  - ALG support for VoIP SIP, MGCP, and H.323
  - IPSec, PPTP, and Net Meeting
- MAC address learning and aging
- Spanning Tree Protocol
- Local switching

### MANAGEMENT INTERFACES

- HTTP 1.0/1.1, HTTP over SSL
- Telnet, Telnet Over SSL
- Standard MIBs:
  - SNMP v1/v2c (RFC 1155-1157, 1901-1908)
  - MIBII (2011,2012,2013)
- Remote logging via syslog

**CAP PERFORMANCE SPECIFICATIONS**

PRODUCT MODEL	1000-E-4A-O	1000-E-8A-O	1000-E-12A-O	1000-E-16A-O	1000-E-4A-W
THROUGHPUT	10 Mbps	10 Mbps	10 Mbps	10 Mbps	10 Mbps
# OF CONCURRENT VOICE CALLS	100	100	100	100	100
# VOICE PORTS	4	8	12	16	4
# ETHERNET SWITCH PORTS (10/100/AUTO)	4	6	9	12	4
# CONCURRENT VPN TUNNELS	25	25	25	25	25

**HARDWARE FEATURES**

**PHYSICAL DIMENSIONS**

PRODUCT MODEL	1000-E-4A-O	1000-E-8A-O	1000-E-12A-O	1000-E-16A-O	1000-E-4A-W
HEIGHT	1.8 Inches	3.6 Inches	5.4 Inches	7.2 Inches	1.8 Inches
WIDTH	10 Inches	10 Inches	10 Inches	10 Inches	10 Inches
DEPTH	5.8 Inches	5.8 Inches	5.8 Inches	5.8 Inches	5.8 Inches
WEIGHT	4 Lbs.	8 Lbs.	12 Lbs.	16 Lbs.	4 Lbs.

**WAN INTERFACES**

- 10/100 BaseT, RJ-45 port
- Auto MDI/MDI-X, Full/half duplex, auto-negotiating

**LAN INTERFACES**

- 10/100 BaseT, Ethernet Switch, RJ-45 port
- Auto MDI/MDI-X, full/half duplex, auto-negotiating

**IEEE 802.11 B/G WIRELESS ACCESS POINT (FACTORY OPTION ONLY)**

- IEEE 802.11b/g: 11/54 Mbps exclusive and mixed mode
- Single diversity antenna
- WEP encryption with/without 802.1x
  - 40 or 104 key bit-length
- WPA with 802.1x
  - User authentication and pre-shared key mode
  - TKIP, WPA with MD-5, TLS, and TTLS authentication

**ANALOG VOICE INTERFACES**

- FXS, RJ11 ports supporting:
  - Analog phone, Key Set, modem or fax
- Bypass port for lifeline POTS
  - Standard 911 access

**EXTERNAL POWER SUPPLY**

Power Rating:  
 - Input: 100-240 VAC, 50/60 Hz;  
 Output: +15V 1.0A  
 Power Consumption:  
 - 1.0A @ 230VAC, 2.0A @ 115 VAC

**ORDERING INFORMATION**

CAP1000-E-4A-O	ETHERNET WAN WITH 4 ANALOG VOICE PORTS
CAP1000-E-8A-O	ETHERNET WAN WITH 8 ANALOG VOICE PORTS
CAP1000-E-12A-O	ETHERNET WAN WITH 12 ANALOG VOICE PORTS
CAP1000-E-16A-O	ETHERNET WAN WITH 16 ANALOG VOICE PORTS
CAP1000-E-4A-W	ETHERNET WAN WITH 4 ANALOG VOICE PORTS AND 802.11 B/G WAP (FACTORY OPTION ONLY)