ASCEND Competitive Analysis

August 1997

Pipeline® 220 Vs. VPNet VSU-1000 and VSU-1010

Pipeline 220 Target Market

The Ascend Pipeline • 220 is targeted at medium to large companies or branch offices and Internet Service Providers (ISPs) who are looking for a secure and flexible Internet access solution with a clear growth path towards multiple LAN segments, Virtual Private Networks (VPNs) and scalable networking.

VPNet Product Description:

VPNet, a San Jose-based company started in late 1995, makes dedicated WAN access hardware designed to create secure VPN links for small to medium sized companies, branch offices and remote sites. The VPNet products support IPSec, but do not support VPN protocols like PPTP, L2F or L2TP.

VPNets's VPN Service Unit (VSU) products - VSU-1000 and VSU-1010 - provide Stac[™] compression, authentication and management services, as well as hardware-based encyption. When used in conjunction with a PC running VPNet's VPNRemote[™] Client Software for Windows[™] 95, the VSU can be used as a remote access server. Earlier this year, VPNet added RADIUS, CHAP, Secure ID, and embedded compression support to its software. Their management software, VPNmanager[™] Tool Suite, is a Java-based application for remote configuration and management of multiple VSUs and VPNremote clients.

The VSU-1000 was introduced in fall of 1996 and claims to support up to 400 remote access clients. It has one Ethernet port and T1/E1 or Frame Relay WAN interfaces.

The VSU-1010 is designed for LAN segments only - it has two Ethernet ports, but no WAN interface. This newer product is promised to support "thousands" of remote users and to handle IPsec at Ethernet wire speeds.

Pricing	domestic	international
VSU-1000	\$3,995	unknown
VSU-1010:	\$4,995	\$5,699
VPNremote client software:	\$99	\$115
VPNmanager Tool Suite	\$3,995	\$4,595

Pipeline 220 Competitive Advantages

- Most comprehensive security solution on the market for the medium- to large-sized business and branch offices; integrated Firewall using Secure Access Manager; support for industry standards based IPSec encryption
- Most complete, scalable high-speed solution with integrated CSU/DSU, T1 support and high-speed serial port for Frame Relay
- Dual integrated 10Base-T ports for two LAN segments
- PCMCIA expansion slot makes future flash memory upgrades quick and simple
- · Management flexibility with support for Java, telnet, Syslog and built-in alarms and tests
- Cost effective routing and security from the leader in Internet access
- Concurrent multiprotocol routing standard (IP, IPX and AppleTalk)
- Optional support for PPTP, ATMP, L2TP and L2F tunneling protocols

Selling Against the VPNet VSU-1000 and 1010

VPNet VSU-products' weaknesses	Ascend Advantages		
Have no track record VPNet is primarily an encryption product company that is tying to get into the access router space. VPNet has no track record in terms of selling/supporting Access Router products.	Ascend is a proven leader and has been shipping access router products for over three years with over 500,000 installations		
High-Priced Higher than the price of the P220 when management and CSU costs are included, with considerably less number of features compared to the P220	Less price, more value		
Do not provide dual LAN support and high speed WAN support in one box Do not support industry standard tunneling protocols <i>Only</i> support IP routing	Ascend's Pipeline 220 has - Two 10Base-T ports for two independent collision domains (LAN Segments) - T1 interface with integrated CSU/DSU - Frame Relay Ascend supports PPTP, ATMP, L2TP and L2F (when standard) The Ascend Pipeline 220 provides concurrent IP, IPX and AppleTalk routing between any of the LAN/WAN ports		
Are not fully integrated	The Ascend Pipeline 220 is ready out of the box — integrated CSU, 10Base-T ports, optional firewall and tunneling		
Lack security options and flexibility—The VPN products do not provide any firewall or authentication capabilities	Ascend has optional integrated stateful inspection, dynamic firewall as well as full IPSec encryption support. The Ascend Pipeline 220 can be configured to have any of the ports (LAN or WAN) configured with varying degrees of firewall protection — an ideal solution for both protecting the internal network while allowing flexible access to Web servers. Ascend also supports unique firewall management options like remote control of the firewall — a necessity for secure information exchange with corporate partners. Additionally, Ascend provides authentication combined with encryption and firewall in one package.		

Feature	Ascend	VPNet	VPNet
	Pipeline 220	VSU-1000	VSU-1010
List price	· ·		
Hardware	\$2,995	\$3,995	\$4,995
Firewall with IPSec	\$2,000	\$3,995 – management	\$3,995 – management
VPN Tunneling	\$1,500	-	-
Total	\$6,495	\$7,990	\$8,990
CSU cost	None	Extra	Extra
Routed/Routing protocols			
IP 3 1	Yes	Yes	Yes
IPX	Yes	No	No
AppleTalk	Yes	No	No
RIP	Yes	No	No
OSPF	Yes	No	No
LAN connectivity			
Ethernet	10Base-T	10Base-T	10Base-T
Segments supported	2	1	2
WAN connectivity			
T1 interface	Yes	Yes	No
Integrated CSU	Yes	No	No
V.35/RS-449 Sync	Yes	Yes	No
Frame Relay (RFC 1490)	Yes	Yes	No
PPP over FR (RFC 1661)	Yes	Yes	N/A
Expansion slots	PCMCIA/DRAM	No	No
Expansion slot applications	Memory	N/A	N/A
Security			
Firewall	Yes	No*	No*
Network Address Translation	Yes	No	No
DHCP server spoofing Encryption	Yes	Yes	Yes
DES/ Triple DES	Yes	Yes	Yes
	Yes	Yes	Yes
VPN tunneling/encryption	ATMP, PPTP, L2F, L2TP,		
protocols	IPsec	IPsec	IPsec
Management and control			
Java GUI configurator	Yes	Yes	Yes
SNMP support	Yes	Yes	Yes
TelNet	Yes	Yes	Yes
T1 loopback test	Yes	No	No

* Bypass mode for non-VPN traffic, Reverse address translation for DHCP clients