ePipe™ 2100 Series

Scalable VPN and Security Gateway

e-business access starts here

The ePipe 2100 series is a complete dial-up network gateway for small to medium sized businesses. It provides shared Internet access for the entire office, Virtual Private Network (VPN) access that securely connects multiple sites and mobile workers, faxing from the desktop, and direct dial access. Furthermore, The 2100 delivers all this at speeds that rival leased line connections, without the costly infrastructure and call charges of traditional Wide Area Networks (WANs).

Unlike other solutions that rely on a single high speed connection, The 2100 can connect to multiple ISPs, ensuring high availability. If a link to an ISP disconnects or fails, the remaining links will continue transferring data.

Optional feature sets include Secure Remote Access (SRA), Site to Site VPN (SSV) and Direct Connection Services (DCS). These allow organizations to participate in the Internet economy at their own pace and within tight budgets. For example, small branch offices may require Web access, e-mail and direct dial connections only. As needs change, you can make greater use of The 2100's functionality.

the total solution

The 2100 offers outstanding value straight out of the box and provides the functionality of a router, packet-filtering firewall, scalable-bandwidth Internet gateway and LAN hub (2148/2188) in one cost effective solution. The 2100's feature sets also provide:-

♦ Secure Remote Access for mobile clients (PPTP server)
♦ Site to Site VPN using IPSec and ML-IP
♦ Direct dial access for remote workers

robust security

The 2100 lets you adjust the level of security to meet your changing requirements. A packet filtering firewall isolates untrusted Internet connections from your LAN. Network Address Translation (NAT) hides your internal network from those on the Internet and allows you to internally host Web and email servers transparently.

The DCS and SRA feature sets both provide session-based authentication, while the SSV feature set also provides strong per packet authentication. Encryption schemes include MPPE for PPTP clients (SRA feature set) in addition to DES, 3DES and Blowfish (SSV feature set).

scalable bandwidth that you control

The 2100 series transparently bonds up to eight dial-up Internet connections together, offering the performance of Frame Relay connections, at a fraction of the cost. Furthermore, the 2100 utilizes simple telephone infrastructures, so there's no costly, complicated hardware to configure or maintain.

The 2100 incorporates two unique Internet connection bonding schemes to deliver a faster aggregate connection. Multilink IP (ML-IP) enables faster Web browsing, e-mail and more simultaneous file downloads for everyone on the network. ML-IP also delivers fast VPN tunnels between multiple sites. ML-IP can be deployed anywhere in the world, and is transparent to your Internet Service Provider (ISP).

The 2100 grows with you, effortlessly

The 2100 series includes an integrated Ethernet hub (2148 and 2188 only), allowing you to add more desktop computers to your Local Area Network (LAN) as your site grows. The 2100 series also lets you add more analog or ISDN modems to increase the performance of your VPN or web downloads. Start with as little as one dial-up 56Kbits/sec connection, increase this bandwidth up to 512Kbits/sec.

The 2100's performance difference

The 2100 delivers sophisticated networking usually found in complex, expensive devices, without the need for a complex WAN infrastructure. It delivers outstanding performance with negligible monthly ISP charges by:-

♦ Bonding 2-8 dial-up Internet connections
♦ Working with any ISP; providing global coverage
♦ Invoking extra connections based on thresholds
♦ Can restrict Internet access to office hours only
♦ Utilizing standard analog or ISDN phone lines

ePipe 2181

ePipe 2148

ePipe 2188

Technical Specifications

Standard Features

Protocols	TCP/IP, RIP, DHCP, TFTP, PPP
Firewall	Packet filtering with access controls
Internet access - outgoing	Network Address Translation (NAT)
Internet access - incoming	NAT with TCP/UDP port redirection
Scalable bandwidth	Multilink IP (ML-IP)
Bandwidth control	Dynamic link establishment, with thresholds

Secure Remote Access Feature Set (SRA)

Authentication & accounting	RADIUS, PAP, CHAP, MS-CHAP
VPN clients	Microsoft VPN adapter (PPTP)
Encryption	MPPE

Site to Site VPN Feature Set (SSV)

Site-to-Site VPN	IPSec tunnel mode, ESP
	MD5, SHA-1 and RMD160 authentication algorithms
Key management	Manual shared keys
Encryption	56-bit DES, 168-bit Triple DES and 128-bit Blowfish
Bandwidth control	Multilink IP (ML-IP) combines connections into a tunnel. Dynamic link establishment based on thresholds

Direct Connection Services Feature Set (DCS)

Authentication	RADIUS, PAP, CHAP
Direct dial-in	Windows dial-up networking; any PPP client

Monitoring and Configuration

Configuration	Simple browser based tool, via console port or Telnet session
Monitoring	ePipe discovery on local network; graphs for connection aggregation; event logging, syslog output; network and communications statistics; hardware status and diagnostics
Upgrade utility	Windows application to upgrade firmware

Hardware

Network	IEEE 802.3 Ethernet
	10Base-T Ethernet multiport hub 8 port (2148/2188)
	10/100Base-T Ethernet port (2181)
Serial	Console RS-232 port (DB-9 male)
	High-speed RS-232 up to 230.4 Kbits/sec (RJ-45)
Power supply	External PSU; 12 Volts @ 1 A
Dimensions	224mm x 152 mm x 45 mm
Mounting	Desktop or wall mount slots
Anti-theft	Kensington Security Slot
Indicators - front	LEDs for power, activity, network and serial I/O traffic
Indicators - rear	LEDs per port Ethernet link, status, activity (2148, 2188)
	LEDs per port Ethernet link, speed, transmit, receive (2181)
Environment	0—40 ^{0} C, rel. humidity 10—80% non-condensing
Approvals	FCC Class A, EN55022 Class A, EN55082-1, CE, C-Tick
Warranty	3 year limited warranty (return to manufacturer)
Accessories included	cables (2 modem/1 Ethernet/1 console); loopback; power pack

Model	Description
ePipe 2181	Dial-up VPN gateway; 8 serial ports / 1 10/100Base-T port
ePipe 2148	Dial-up VPN gateway; 4 serial ports / 8 port Ethernet hub
ePipe 2188	Dial-up VPN gateway; 8 serial ports / 8 port Ethernet hub
SRA	Secure Remote Access Feature Set
SSV	Site to Site VPN Feature Set
DCS	Direct Connection Services Feature Set
Dual DB25	Pack of two RJ45 to DB25 male modem cables
Quad DB25	Pack of four RJ45 to DB25 male modem cables

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ePipe

The Leaders in Multilink IP