product information

Ascend Pipeline 75

Your network is expanding and so are your needs. The Pipeline 75 closes the gap between telecommuters and corporate networks or the Internet.

Telecommuting ▾ Internet Access ▾ Remote Access

The Pipeline® 75 is an Ethernet-to-ISDN bridge/router that gives telecommuters and remote offices the flexibility to step up to the latest in digital technology without leaving the analog world behind. With the Pipeline 75, you can establish seamless connections that deliver voice and data between home offices and the corporate network or the Internet. The Pipeline 75 offers a bandwidth on demand capability that dynamically manages these connections to give users the throughput necessary for all remote networking needs.

The integrity of dial-up connections is monitored by built-in remote management features that allow network managers to troubleshoot problems directly from the central site. Features such as SNMP, Syslog and Telnet extend your control over the network and eliminate the down time that can come with poor connectivity. The Pipeline 75 helps you achieve the most out of your remote networking environment with the features and reliability you need.

ASCEND

Remote Networking Solutions for Telecommuters and Remote Offices

Integrated analog and digital capabilities in one complete telecommuting solution

By consolidating separate transmission services over one ISDN BRI line, telecommuters no longer have the burden of maintaining separate analog and digital lines. The Pipeline 75 allows users to have a single digital line that serves all their networking needs.

- High-speed Ethernet-to-ISDN bridge/router
- Standard U interface (NI-1 compliant) eliminates the need for an external NT1 device (S/T model also available)
- Dual analog ports allow you to connect phones, modems and fax machines over a single ISDN line
- Advanced analog calling features (CLID, Hold, Drop, Transfer and Conference)
- Sophisticated call routing directs calls to the correct analog device (phone, fax or modem)

Concurrent routing and bridging ensure efficient connectivity to all LANs and the Internet

Concurrent routing and bridging eliminate the need for two separate devices by providing one configurable solution for accessing any LAN and the Internet.

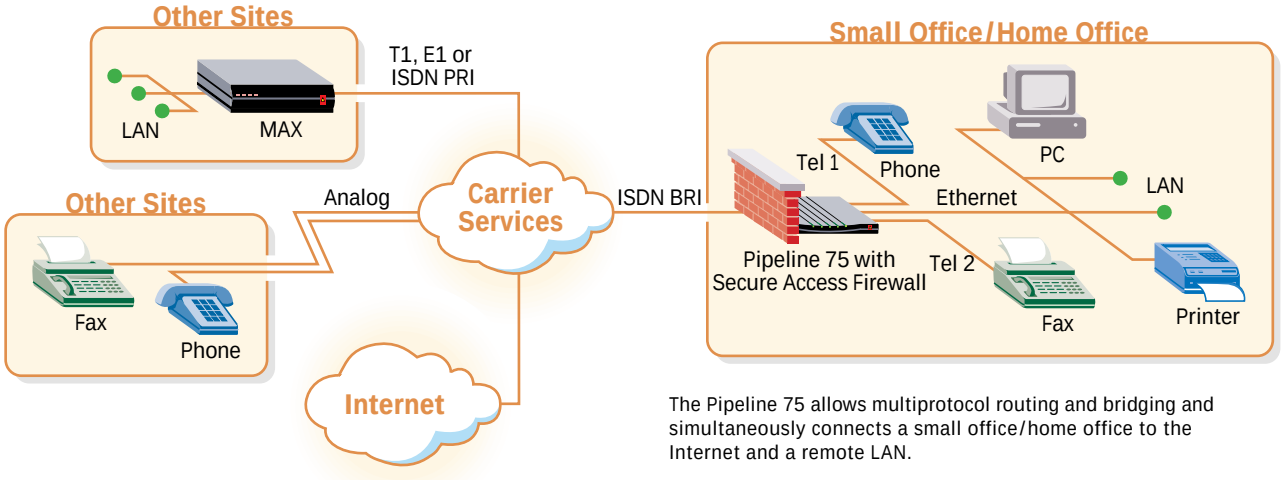
- IP, IPX and AppleTalk routing
- BCP standard multiprotocol bridging
- PPP, Multilink PPP (MP), Multilink Protocol Plus™ (MP+)

SmoothConnect ensures easy and cost-effective connectivity

SmoothConnect provides all the features and functionality that make it easy and cost-effective to connect to a corporate headquarters or the Internet. It allows even novice users to configure and setup their Pipeline for access, removing the barriers that used to make remote connectivity cumbersome. In addition, SmoothConnect reduces costs by making efficient use of protocols and bandwidth. This new functionality includes the following ease-of-use and cost savings features:

- The Java-based Pipeline Configurator (JBPC) is a state-of-the-art configuration utility for graphical point-and-click Pipeline setup and configuration
- Touch tone configuration of ISDN B-channel telephone numbers using an analog telephone
- AutoSwitch and AutoSPID detection automatically detects the ISDN switch type and SPID numbers
- Ascend's patented Dynamic Bandwidth Allocation™ saves money by increasing/decreasing bandwidth as needed for the duration of your connection
- Integrated idle timer allows Pipeline users to remain connected without paying for telecommunications resources when they aren't being used
- Network Address Translation (NAT) eliminates the need to pay for a dedicated TCP/IP address by allowing the Pipeline to accept a dynamically assigned address from a central-site pool of addresses
- Dynamic Host Configuration Protocol (DHCP) spoofing allows network managers to configure and dynamically assign IP addresses across multiple clients from the Pipeline
- Data compression that boosts throughput up to 512 Kbps to handle bandwidth-intensive files

Internet Access



The Pipeline 75 allows multiprotocol routing and bridging and simultaneously connects a small office/home office to the Internet and a remote LAN.

Manage remote locations as if they were part of the central site

Remote management capabilities reduce the cost of installation and ongoing support by enabling network managers to monitor and troubleshoot remote user problems directly from the central site.

- SNMP (MIB II) support
- Telnet remote management
- The Ascend remote management protocol
- Syslog
- WAN loopback
- Flash memory for easy software upgrades

Java-Based Pipeline

The Java-based Pipeline Configurator (JBPC) is a Graphical User Interface (GUI) that lets Pipeline users configure, save and restore the Pipeline 25-*Px*, 25-*Fx*, 50, 75 and 85 configurations from a PC or Macintosh over an Ethernet LAN connection. It is included free of charge on the Pipeline Companion CD-ROM or you can download select portions via anonymous FTP at ftp://ftp.ascend.com/pub/Software-Releases/pl_cdrom.

The JBPC offers a comprehensive QuickStart utility designed to get users up and running in less than 15 minutes. This utility guides users through the application and features complete HTML-based, on-line help. Because the JBPC runs over Ethernet, it eliminates the need for a serial cable, a VT100 terminal or terminal emulation software.

Network Address Translation

Pipeline 50, 75, 85 and 130 users no longer need to pay for a dedicated IP address with the Network Address Translation (NAT) capability. When a Pipeline user connects to the Internet or any other IP network, a network address is transparently assigned to the user for the duration of the connection session. And when NAT is used in conjunction with Dynamic Host Configuration Protocol (DHCP) spoofing, IP address management becomes a breeze. Network managers can configure and dynamically assign IP addresses to multiple workstations on the remote office LAN in one easy step.

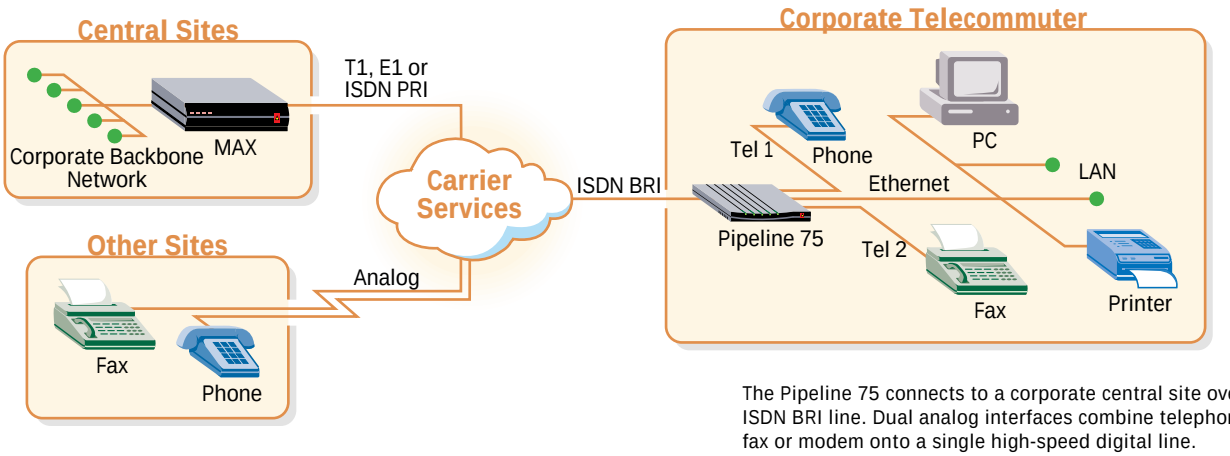
Ascend's Secure Access Solution

Protect corporate resources with Ascend's Secure Access

Ascend's Secure Access™ offers a combination of dynamic firewall, encryption and authentication in one rock-solid security solution. Secure Access is ideal for companies who want to secure their information assets at the corporate LAN, remote offices and telecommuters' home offices. It also provides the data integrity, privacy and data origin authentication needed when using the Internet to establish corporate intranets. In addition, the Pipeline 75 includes standard security features such as PAP, CHAP, CLID and token card security to deliver the most complete security solution available on the market today for securing the edge of your network.

Secure Access is a cost-effective, single vendor solution for securing your company's remote network against attacks on sensitive data. See the SecureConnect datasheet or visit the Ascend Web site for more information.

LAN to LAN Access



The Pipeline 75 connects to a corporate central site over an ISDN BRI line. Dual analog interfaces combine telephone, fax or modem onto a single high-speed digital line.

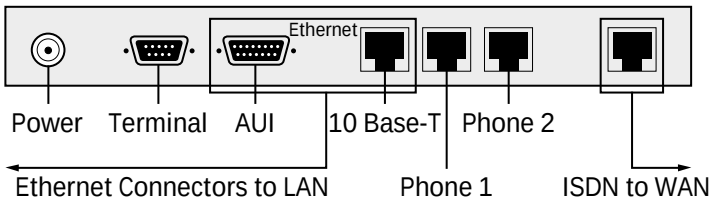
Hardware Specifications

Dimensions	8.63 in x 6.19 in x 1.25 in/ 22 cm x 15.7 cm x 3.2 cm
Weight	2.25 lbs/1.13 kg
LAN Interface	10 Mbps Ethernet (AUI, 10Base-T)
WAN Interfaces	BRI S/T Interface (Model: P75-1SBRI) BRI U Interface (Model: P75-1UBRI)
Software Upgrade	Via built-in flash RAM
Power Requirements	90-130VAC, 0.4A 220-240VAC, 0.2A 47-63Hz
Operating Requirements	Temperature: 32-104˚F/0-40˚C Altitude: 0-14,800 feet/0-4,500 meters Relative Humidity: 5-9o% (non-condensing)
Safety Certifications	FCC Class B,CSA, UL
EMI/RF	FCC Part 68, FCC Part 15

Software Specifications

Protocols Supported	TCP/IP, IPX and AppleTalk routing, BCP standard bridging of all protocols
WAN Protocols Supported	PPP, Multilink PPP (MP), Multilink Protocol Plus (MP+)
Bandwidth Management Security	MP, MP+, TCP header compression, STAC data compression PAP, CHAP, Callback, Telnet password, token-based security (Security Dynamics, Enigma Logic), packet filtering, optional integrated dynamic firewall with IPSec Encryption (Model: P75-1xBRI-ASA)
Management	SNMP, Telnet, Syslog, Ascend's remote management protocol, direct serial cable connection (DB-9), NAT, JBPC

Pipeline 75 Back Panel



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Ascend Communications, Inc. is a leading, worldwide provider of remote networking solutions for corporate central sites, Internet Service Providers' points of presence, remote offices, mobile workers, and telecommuters. Ascend develops, manufactures, markets, sells and supports products which utilize bandwidth on demand to extend existing corporate networks for applications such as remote LAN access, Internet access, telecommuting, SOHO connectivity and video-conferencing/multimedia access. Detailed information on Ascend products, news announcements, seminars, service and support is available on Ascend's home page at the World Wide Web site: http://www.ascend.com.

Ascend markets the BSTDX, CBX, IP, MAX, Multiband, MultiDSL, Pipeline, SA, SecureConnect and STDX families of products. Ascend products are available in more than 30 countries worldwide.

Specifications are subject to change without notice.

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Remote Networking Solutions That Work.™

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