Ascend
Pipeline 25-*Px*

Telecommuters ▼ **Internet Access** ▼ **Remote Access**
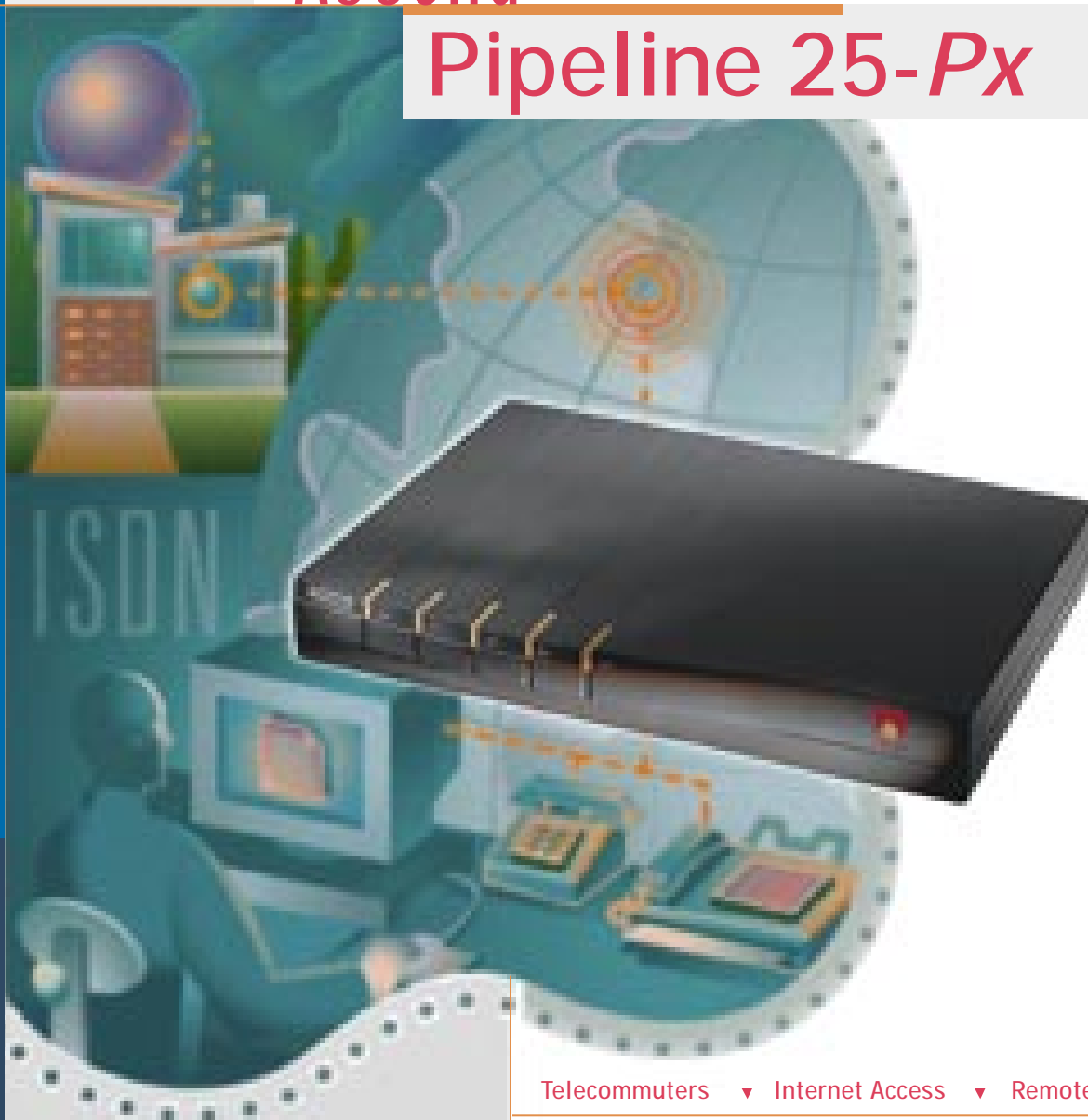
You require more from a remote access system. The Pipeline 25-*Px*, with Ascend's Dynamic IP Access (ADIA), is the low-cost solution for high-powered connections to the Internet or a corporate network.

The Pipeline® 25-*Px* is an Ethernet-to-ISDN router that gives an individual user high-speed access to a single destination. With the Pipeline 25-*Px*, a user has a cost-effective way to get all the advantages of analog and digital integration with the added benefit of Ascend's Dynamic IP Access (ADIA). ADIA allows the user to receive a unique IP address every time they access the Internet or a corporate LAN, alleviating the high cost of owning a dedicated IP address.

The Pipeline 25-*Px* also has advanced features such as Dynamic Bandwidth Allocation™ (DBA), which provides a high-powered solution for transferring data from the Internet. DBA adjusts bandwidth to provide the throughput needed to download large files such as video clips or high resolution graphics from the World Wide Web (WWW), other Internet services or corporate LANs. The Pipeline 25-*Px* is easy to set up and configure through a Java-based application, and it comes equipped with features such as Ethernet support and integrated security—everything needed to make high-speed connections on the digital superhighway.

ASCEND

Networking Solutions for Home Offices and Teleworkers

Integrate analog and digital capabilities into 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 25-*Px* allows users to have a single digital line that serves their networking needs.

- High-speed Ethernet-to-ISDN 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 (Hold, Drop, Transfer and Conference)
- Sophisticated call routing directs calls to the correct analog device (phone, fax or modem)

Delivers a cost-effective solution for making high-speed Internet connections

With Ascend's Dynamic IP Access (ADIA), a network address can be automatically and transparently supplied to the user, thereby reducing the costs involved with Internet access. ADIA alleviates the need to have a dedicated IP address exclusively.

- ADIA is nonproprietary and is compatible with any product that can assign IP addresses
- High-speed, digital access to the Internet via ISDN transfer rates up to 128 Kbps

Bandwidth on demand maximizes performance and decreases costs

Dial-up connections are established and removed transparently without interruptions to the user. Costs are minimized because you only pay for bandwidth as it is needed.

- Dynamic Bandwidth Allocation (DBA) varies channel usage by increasing the number of B-channels for high-performance tasks and dropping a channel when throughput is not needed
- Inverse multiplexing uses both B-channels for 128 Kbps throughput
- Incoming and outgoing analog calls preempt one B-channel while maintaining one B-channel for data connections
- Two analog devices can be used simultaneously when both B-channels are available
- PPP, Multilink PPP, Multilink Protocol Plus™ (MP+)

Industry-standard security protocols protect against unauthorized access

Support for user authentication makes it easy to manage the security of large-scale remote access applications. The security features on the Pipeline 25-*Px* can be configured to verify all access attempts and to permit only authorized users.

- Authentication profiles with PAP or CHAP

Internet Access
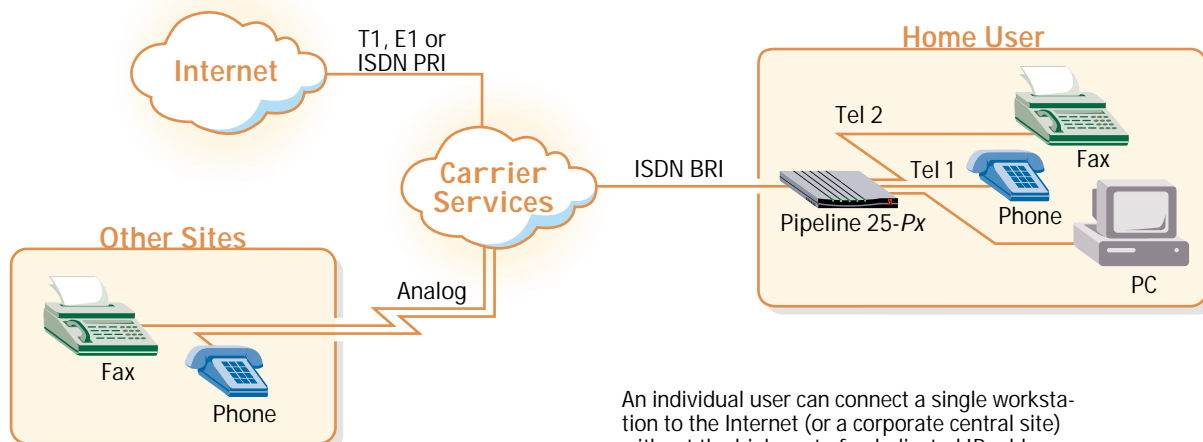
An individual user can connect a single workstation to the Internet (or a corporate central site) without the high cost of a dedicated IP address. With the Pipeline 25-*Px*, an IP address is assigned for the duration of the call.

Built-in Ethernet interface maximizes performance and compatibility

The Ethernet interface gives you the flexibility to connect any type of computer directly to the Pipeline 25-*Px*. With 10 Mbps Ethernet, you can take advantage of the full throughput of an ISDN BRI line.

- Supports multiple platforms (PC, Unix workstation, or Apple)
- Supports varying software configurations

Monitor remote access equipment directly from the central site

Ascend's remote management protocol allows Internet Service Providers and network managers using Ascend's equipment to remotely monitor the Pipeline 25-*Px*. They can check configurations or change settings directly from the central site when it is required.

- WAN loopback
- Flash memory for easy software upgrades

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 and 75 configurations from a PC or Macintosh over an Ethernet LAN connection. It is included free of charge with the Pipeline Companion CD-ROM and can be run as a stand-alone solution or within a Java-capable browser.

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, VT100 terminal or terminal emulation software.

Pipeline 25-*Px*

Why Ascend's Dynamic IP Access (ADIA)?

Ascend's Dynamic IP Access (ADIA) is a nonproprietary protocol that gives users a cost-effective method of network addressing. Because of the tremendous increase in popularity of the Internet, legal network addresses are rapidly becoming scarce. As a result, users are charged an additional fee for exclusively owning an IP address.

With the Pipeline 25-*Px*, a network address is transparently assigned to the unit for the duration of the session. The IP address is released when the call is finished and can be reassigned to the next caller. Users get the benefit of routing capabilities and high-speed digital access to the Internet or corporate LANs without paying additional charges for owning a dedicated IP address.
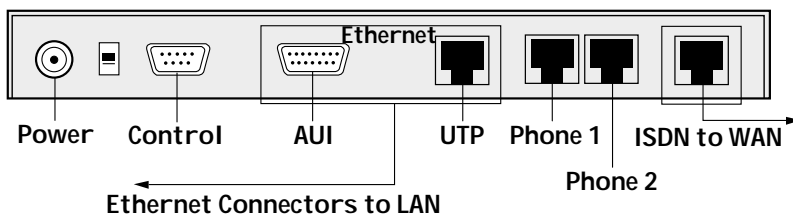
Hardware Specifications

Dimensions	8.2 in x 6 in x 1.2 in/ 20.8 cm x 15.24 cm x 3.05 cm
Weight	2.25 lbs/1.02 kg
LAN Interface	10 Mbps Ethernet (AUI, 10Base-T)
WAN Interface	BRI S/T Interface (model: P25-1S-PX) BRI U Interface (model: P25-1U-PX)
Software Upgrade	Via built-in flash RAM
Power Requirements	90-130VAC, 0.4A 22-24VAC, 0.2A 47-63Hz
Operating Requirements	Temperature: 32-104˚F/0-40˚C Altitude: 0-14,800 feet/4,500 meters Relative Humidity: 5-95% (non-condensing)
Safety Certifications	FCC Class B, CSA, UL
EMI/RF	FCC Part 68, FCC part 15

Software Specifications

Protocols Supported	TCP/IP routing
WAN Protocols Supported (MP+)	PPP, Multilink PPP (MP), Multilink Protocol Plus
Bandwidth Management	Multilink PPP (MP), Multilink Protocol Plus (MP+), TCP header compression
Security	PAP, CHAP
Management	Serial cable connection (DB-9), Ascend's remote management protocol, Java-Based Pipeline Configurator

Pipeline 25-*Px* Back Panel

Power   **Control**   **AUI**   **UTP**   **Phone 1**   **ISDN to WAN**

Ethernet

Phone 2

Ethernet Connectors to LAN

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.

Ascend markets the GRF, MAX, Multiband, Pipeline, Netwarp and Security families of products. Ascend products are available in more than 30 countries worldwide.

ASCEND

**Remote Networking
Solutions That Work.™**

ISO 9001
REGISTERED