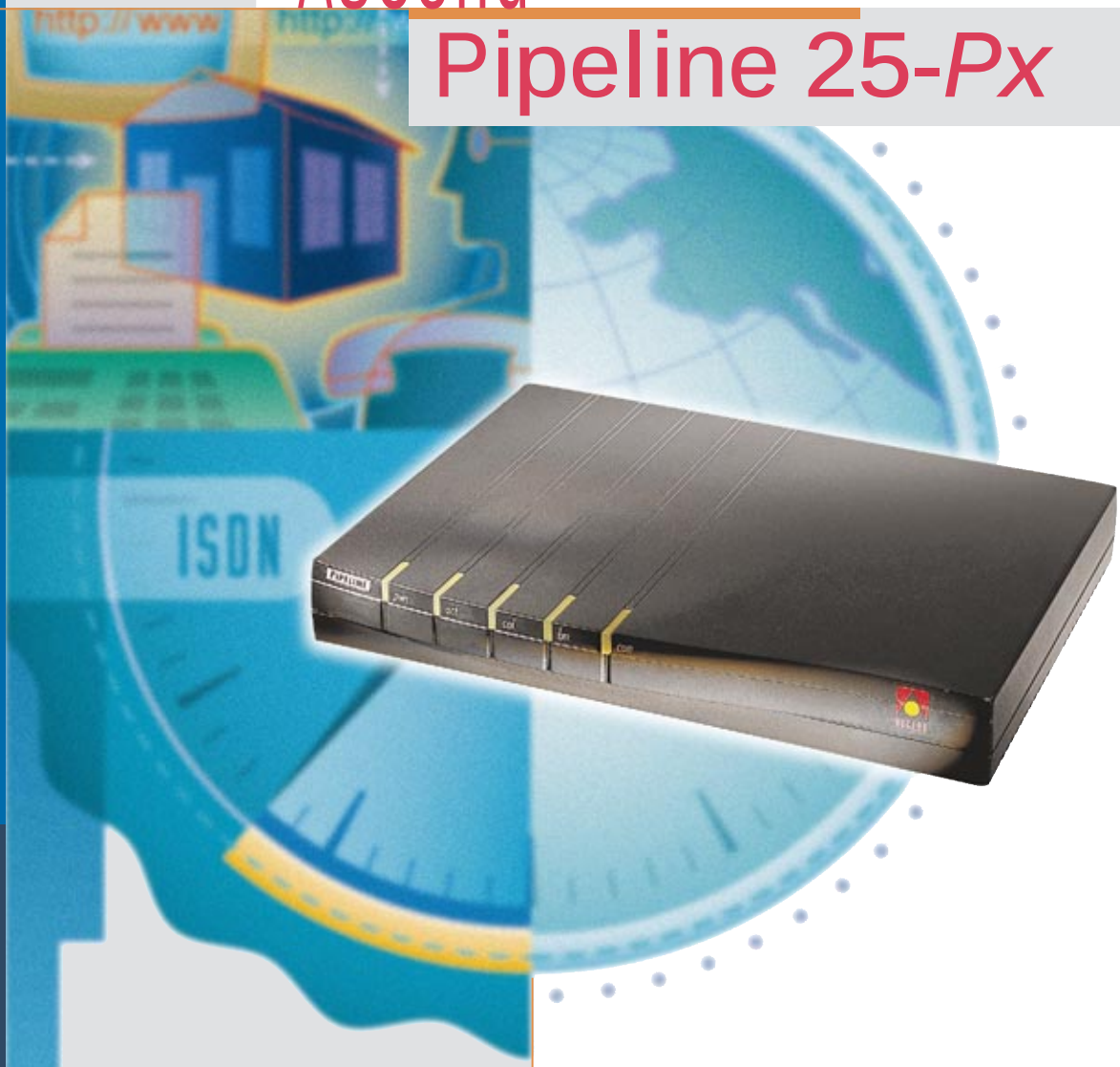
product information

Ascend Pipeline 25-*Px*



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.

Teleworkers ▾ Internet Access ▾ Remote Access

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 and 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 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 (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 512 Kbits/s (with optional compression)

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.

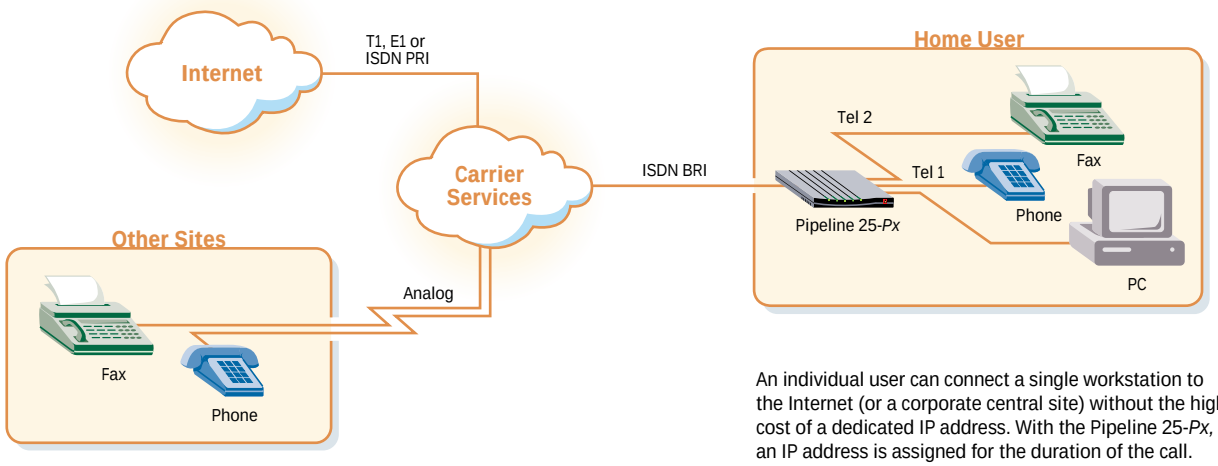
- Dynamic Bandwidth Allocation (DBA) varies channel usage by increasing the number of B-channels for high performance tasks and dropping a channel when throughput is not needed
- Inverse multiplexing uses both B-channels for 128 Kbits/s throughput
- Optional data compression boosts throughput up to 512 Kbits/s
- 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 Mbits/s Ethernet, you can take advantage of the full throughput of an ISDN BRI line.

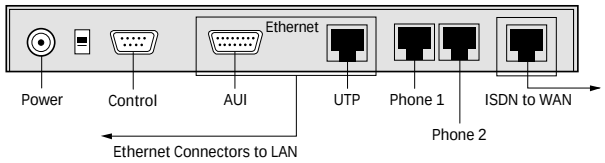
- Supports multiple platforms (PC, Unix workstation, or Apple)
- Supports varying software configurations

Monitor remote access equipment directly from the central site

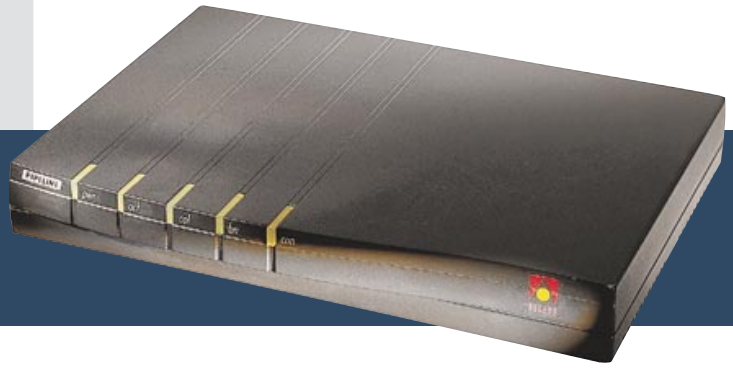
Ascend's remote management protocol allows Internet Service Providers and network managers using Ascend's equipment to remotely monitor the Pipeline 25-*Px*. They can check configurations or change settings directly from the central site when it is required.

- WAN loopback
- Flash memory for easy software upgrades

Pipeline 25-*Px* Back Panel



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 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 MB/S 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	PPP, Multilink PPP (MP), Multilink Protocol Plus (MP+)
Bandwidth Management	Multilink PPP (MP), Multilink Protocol Plus (MP+), TCP header compression, STAC data compresssion (optional)
Security	PAP, CHAP
Management	Serial cable connection (Db9), Ascend's remote management protocol

Ascend's Remote Networking Products

MAX™ Family

Designed specifically for remote access server applications. Supports ISDN BRI, ISDN PRI, T1/E1 and Ethernet on the base unit.* Allows simultaneous calls from ISDN BRI, frame relay and/or modem users over ISDN PRI, channelized T1/E1, or ISDN BRI lines.

Pipeline™ Family

Pipeline products are designed to connect users in small or home offices to backbone networks and/or the Internet. Pipeline models support Ethernet to ISDN, Switched 56 or Leased 56 services, and Ethernet to 56 Kbits/s or 64 Kbits/s frame relay services.*

Multiband™ Family

Multiband bandwidth-on-demand controllers are designed primarily for videoconferencing applications and let users dial-up bandwidth in increments of 56/64 Kbits/s up to 4 Mbits/s, using all types of digital access lines*—Switched 56, T1/E1, ISDN BRI, ISDN PRI and network carrier services.

* Depending on model and configuration

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Ascend Communications, Inc. (NASDAQ: ASND) is a leading, worldwide provider of remote networking solutions for corporate central sites, Internet Service Provider points of presence, remote offices, mobile workers and telecommuters. Ascend develops, manufactures, markets, sells and supports products with bandwidth on demand to extend existing corporate networks for applications such as remote LAN access, Internet access, telecommuting, SOHO connectivity and videoconferencing/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 MAX, Pipeline and Multiband families of products. Ascend products are available in more than 30 countries worldwide.

Dynamic Bandwidth Allocation™ (U.S. Patent No. 5,231,649), MAX™, Multiband™, Multilink Protocol Plus™, and Pipeline™ are trademarks of Ascend Communications, Inc. Other trade names mentioned in this publication belong to their respective owners.

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Remote Networking
Solutions That Work.™