Product Information

ASCEND

Product Information

Pipeline 400 T1/E1

TELECOMMUTING

REMOTE ACCESS

INTERNET ACCESS

Our world is moving away from analog modems toward fully digital internetworking. Using integrated digital interfaces, digital modems, and serial ports, the Ascend Pipeline family supports both analog and digital dial-up and leased lines. This provides a smooth migration path to an all-digital environment as digital facilities become available at each of your remote sites.



The Ascend Pipeline 400 remote access and Internet access servers allow you to extend the reach of your corporate enterprise network out to smaller remote sites.

The Pipeline 400 T1/E1 remote access servers support up to 30 concurrent analog or digital dial-in users.

Pipeline 400 products combine to create a fully integrated access solution:

- IP and IPX
- Routing and bridging
- Ascend market-leading Inverse Multiplexing
- Data compression
- Dynamic Bandwidth Allocation
- LAN & WAN network management
- Security
- 8 optional integrated digital modems for analog dial-in
- Terminal Server

Access Routing and Bridging

Ascend Pipeline remote LAN access products employ a RISC-based architecture to provide all the power you need for the protocols you run to your branch office, now and in the future.

- PPP, SLIP, X.25 and MP+ (Multichannel Point-to-Point Protocol)
- Terminal Server
- Transmit and receive packet filtering

Bandwidth on Demand

Dial-up connections are automatically established as needed.

- Inverse Multiplexing up to full 2 Mbit/s
- Data compression
- Dynamic Bandwidth Allocation (Rubber Bandwidth™)
- Support for all available digital dial-up and leased services
- Certified in 26 countries

Digital Modem Networking

Allow analog modem access as well as digital service access.

Optional digital modems on the Pipeline allow remote modem-based users to dial in over analog lines to a digital service line connected to the Pipeline. Thus, Pipeline allows calls to and from leased, remote modem-based and remote switched digital users.

Security

Maintain system integrity as the number of remote LANs and telecommuters increase.

Pipeline products employ rigid security features that ensure network access only to authorized users. Pipeline supports security protocols that allow password encryption, restricted access based on IP address, and user privilege levels.

- PAP, CHAP, Callback, Caller Number ID, Password, TACACS, RADIUS
- Token-based security including SecurID and Enigma

Full Management

Manage your long-haul equipment and bandwidth as easily as your local LAN facilities. Ascend Pipeline remote LAN access systems have integrated digital interfaces to give you the control you need to manage your equipment, bandwidth usage, and wide-area links.

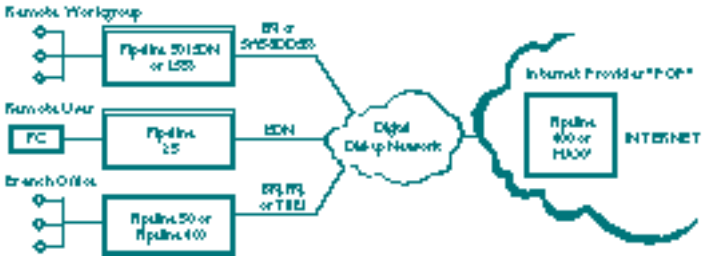
- MIB I & II support
- Telnet remote management
- Call Detail Reporting (CDR)
- Usage Capping
- Full set of WAN loopbacks
- FLASH memory for software downline loading

Remote Access to Corporate LAN



Pipeline remote access servers combine the functionality of several different components in a single box. By incorporating leased and dial-up routing and bridging technology with integrated WAN interfaces, inverse multiplexing, and LAN and MAN network management, the Pipeline family cuts costs for remote offices and remote users.

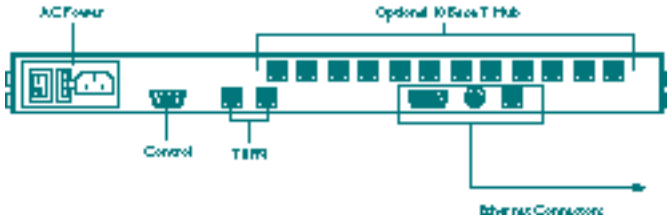
Internet Access:Remote Site and Central Site



Pipeline remote access products provide high-performance digital dialed access to the Internet for remote users and sites. Internet provider Points-of-Presence (POPs) use the Ascend MAX 4000 or Pipeline 400 as a remote access server to support these remote users and sites.

*For more information see the MAX 4000 datasheets.

Pipeline 400 T1/E1 Back Panel



Hardware Specifications

LAN Interfaces	WAN Interfaces	Size	Power Requiremets
Ethernet (AUI,10Base-T, COAX)	T1,E1,ISDNPRI	1.75" x 17.0" x 12.0"	90-130VAC, 0.3-0.5A 220-240VAC, 0.2-0.4A 47-63Hz

Software Specifications

LAN-to-LAN Routing	Other Protocols	Security	Network Management
IP, IPX,Filtering,Bridging	TCP, DDP, UDP, ICMP, PING, FINGER,ECHO, RIP, ZIP	PAP, CHAP, Callback,Password, TACACS,RADIUS	SNMP,Telnet Remote Access,Syslog,FLASH EEPROM,Call Detail Reporting (CDR), WAN Loopback

Ascend Communications,Inc. Headquarters

1275 Harbor Bay Parkway
Alameda,California 94502
Tel:510.769.6001
Fax:510.814.2300
E-mail:info@ascend.com
Internet Home Page:
http://www.ascend.com
Toll Free:800.621.9578

Ascend Communications,Inc. (NASDAQ:ASND) products use global bandwidth on demand to enhance and extend corporate backbone networks for remote LAN access,Internet access, telecommuting,video access,and leased-line backup and overflow.

Ascend markets the Multiband,Pipeline and MAX families of products.Ascend products are available in more than 26 countries worldwide.

MAX™,Pipeline™ and Multiband™ are trademarks of Ascend Communications,Inc. Other trade names mentioned in this publication belong to their respective owners.

Specifications are subject to change without notice.

Copyright © 1995
Ascend Communications,Inc.

09-95