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product information

Ascend Multiband Plus



Your sophisticated network applications require a powerful access solution. The Multiband Plus provides extensive bandwidth management capabilities and high-speed global connectivity.

Multimedia Access ▾ Videoconferencing ▾ Backup/Overflow

The Multiband™ Plus is a dynamic bandwidth controller designed for users needing high-speed access for multiple applications. It provides bandwidth on demand at speeds from 56 Kbits/s to three Mbits/s and handles as many as four concurrent applications including videoconferencing, LAN interconnectivity, electronic imaging, disaster recovery, private network backup and private network overflow.

Using Ascend's patented Dynamic Bandwidth Allocation™, the Multiband Plus varies bandwidth as needed, providing considerable cost savings on monthly network charges. It supports a dynamic mix of dial-up services and inverse multiplexing protocols to assure interoperability between a wide range of data communications equipment. Certified for use internationally, Multiband Plus gives companies a global solution for interconnectivity.

Networking Solutions for Videoconferencing, Backup and Multimedia

Supports multiple platforms for flexible network access to concurrent applications

Multiband Plus supports the complete Bandwidth ON Demand INteroperability Group (BONDING) specification for interoperability with data communications equipment. Ascend also provides a wide range of choices for inverse multiplexing protocols. Applications can choose between these standards on a call-by-call basis.

- Ascend's proprietary inverse multiplexing standard
- Bandwidth ON Demand INteroperability Group (BONDING) inverse multiplexing standard
- Nx56/64–inverse multiplexing calls worldwide in increments of 56 or 64 Kbits/s
- Supports single or dual V.35, RS-449/RS-422, or X.21 host interfaces, which are selected by choosing the appropriate cable
- Exact clocking and 56-64 Kbits/s rate adaption
- Speed dialing and stored call profiles
- Supports high-speed desktop videoconferencing

Operates with domestic and international services for global connectivity

Multiband Plus offers access from Leased 56 (DDS), Switched 56, T1, Fractional T1, ISDN Basic Rate and ISDN Primary Rate (plus Multirate Services) to all switched digital services. Each T1 network port can be equipped with an integrated ESF CSU or ordered with a DSX interface.

- AT&T ACCUNET, MCI CPDS, Sprint VPN
- Multiple PPT services in Europe and Pacific Rim
- Local Exchange Carrier services

Bandwidth on demand maximizes performance and decreases costs

A variety of bandwidth management capabilities within Multiband Plus can be applied on a call-by-call basis to suit specific needs, including backup and overflow applications.

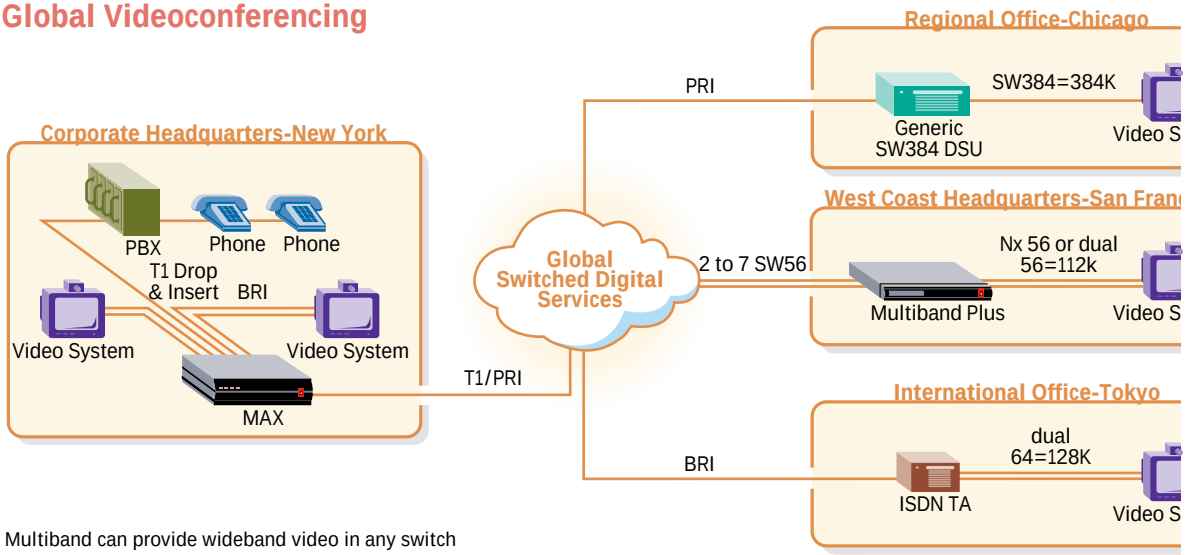
- Bandwidth controlled manually, automatically or by time-of-day profile
- Ascend's Dynamic Bandwidth Allocation monitors traffic and automatically controls speed of the connection for back-up and overflow applications
- No special signaling required from the bridge, router or T1 MUX

Extensive management features offer simplified setup and administration

An inband management capability allows you to modify or control your system remotely or from the central site. Features support local and remote diagnostics as well as providing menu-driven management.

- Dial-up remote management from any Ascend Multiband product
- Local and remote loopback
- Password security
- Channel-by-channel bit error rate testing
- Configuration backup
- Field activation of software features
- Controllable from desktop or VT-100 terminal
- Supports a line-oriented control interface that allows programmatic control from computer management terminals

Global Videoconferencing



Multiband can provide wideband video in any switch user environment.

Multiband Plus Back Panels

Ensures compatibility with a broad range of DTE manufacturers

By supporting multiple dialing protocols, Multiband Plus gives you exceptional flexibility when setting up your videoconferencing applications.

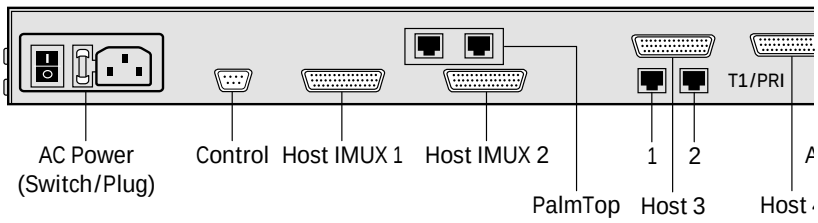
- RS-366 for push-button dialing from video conferencing systems or host front ends
- V.25 bis for high-speed dialing from LAN bridges, routers and videoconfer encing systems
- Control-lead dialing for establishing and clearing calls in response to tandard control signals
- X.21 dialing for international applications

Drop-and-insert capability for maximum network access utilization

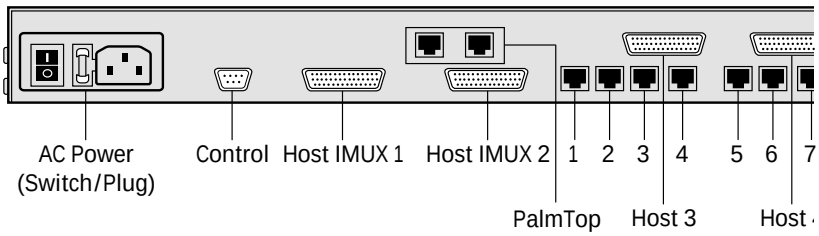
Unused channels are passed to a downstream device such as a PBX for maximum utilization of a network access line. The channels that are passed through can be configured for tone dialing, pulse dialing or transparent higher-speed channels.

- T1/T1 drop and insert
- PRI to T1 conversion

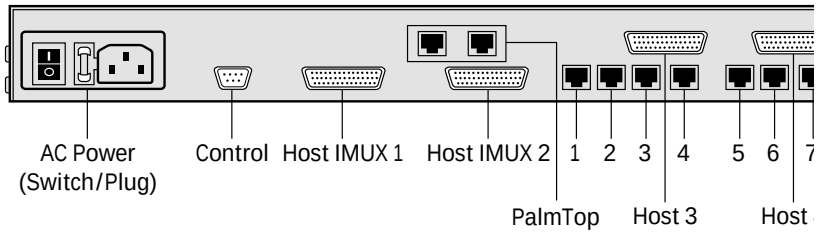
Multiband Plus T1/PRI



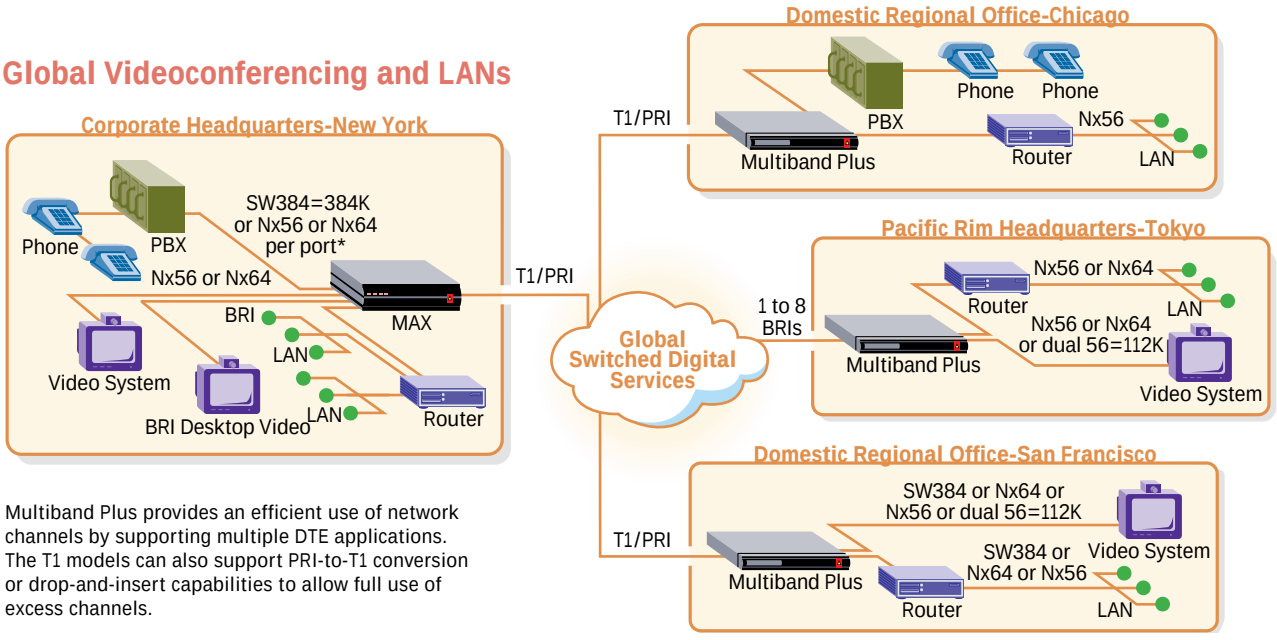
Multiband Plus BRI



Multiband Plus SW56/2W and 4W



Global Videoconferencing and LANs



Multiband Plus provides an efficient use of network channels by supporting multiple DTE applications. The T1 models can also support PRI-to-T1 conversion or drop-and-insert capabilities to allow full use of excess channels.

Hardware Specifications

Dimensions	17 x 12 x 1.75 in (1U) [43.2 x 30.5 x 4.5 cm]
Weight	10 lbs [4.5 kg]
Power Requirements	90-130VAC, 0.2-0.4A 220-240VAC, 0.1-0.2A, 47-63 Hz
Operating Requirements	Operating temperature: 32-104˚F [0-40˚C] Storage temperature: -40-176˚F [-71.4-80˚C] Humidity: 0-90% (non-condensing)

Compliance

- National ISDN-1, NET3, 1TR6, BTNR191, INS-64, EN60950, EN41003, CISPR22
- Relevant parts of AT&T publications 235-900-301, 235-900-322, 801-802-100, 41458, 54016, 54019, 61330, 62310, 62411, TR41449, TR41459
- Relevant parts of Northern Telecom AB01, NIS S208-4.0, NT1-2W-SW56
- ANSI T1.403
- FCC parts 15 & 68
- UL, CSA listed

Models

Base Systems	Multiband Plus SW56/4W with 7 full-duplex four-wire 56Kbits/s network interfaces Multiband Plus SW56/2W with 7 full-duplex two-wire 56Kbits/s network interfaces Multiband Plus BRI with up to 8 ISDN Basic Rate Interfaces Multiband Plus T1/PRI with up to 2 T1/Primary Rate Interfaces, and optional built-in CSUs on one or both network interfaces
DTE Connection	4 DB-44 connectors, standard
Optional	19'' rack mount

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.

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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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