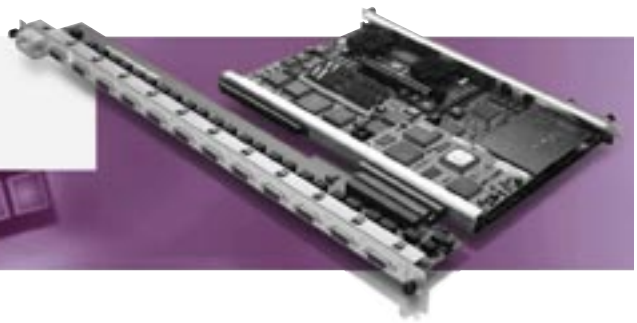
PRODUCT INFORMATION

Ascend

B-STDX 8000/9000
12-Port ATM T1/E1 Module



The 12-port ATM T1/E1 Module for the B-STDX Multiservice Frame Relay switch provides high-density and cost-effective, low-speed ATM UNI access and trunking solutions. This module lets the B-STDX switch offer unsurpassed ATM T1/E1 port density, flexible ATM cell switching, Frame Relay to ATM Service Interworking and Frame Relay to ATM Network Interworking.

High density delivers cost-effective low-speed ATM circuit concentration

The 12-port ATM T1/E1 Module lets service providers offer cost-effective ATM access, leveraging their existing installed copper base. The module can concentrate low-speed T1/E1 ATM circuits from remote branch sites carrying data, voice and video applications to central corporate locations. With industry-leading port density, the 12-port T1/E1 module allows providers to offer the benefit of ATM over cost-effective, low-speed circuits. Combined with the scalability and versatility of Ascend Broadband Access products, the module provides a powerful end-to-end solution.

With its 16-slot modular architecture, the Ascend B-STDX switch provides industry-leading port density for T1/E1 ATM access.

- Twelve physical ports at T1/E1 rate full duplex
- Hardware cell bypass to support ATM cell switching
- ATM UNI DTE and DCE configurable ports
- Support for up to 4000 Virtual Circuits (VCs) per card
- Support for CBR, rt-VBR, nrt-VBR, UBR traffic types
- Per VC queuing and traffic shaping for interworking Permanent Virtual Circuits (PVCs)
- UPC policing on ingress traffic
- Operation and Management (OAM) F_4 and F_5 support
- Connection Admission Control (CAC)

T1/E1 ATM trunks over Wide Area Networks

The module provides a cost-effective, reliable alternative in trunking applications where DS3 or E3 circuits may prove too costly. Use of the Cell Trunk provides seamless integration of the B-STDX Multiservice Frame Relay Switch and the CBX 500 Multiservice ATM Switch in a single network. Ascend's OSPF-based Virtual Network Navigator (VNN) sees this integrated network as a single routing domain, where all Ascend switches function as peers allowing for faster provisioning and ease of maintainability. Additional trunking configurations including OPTimum trunks and Network-to-Network (NNI) trunks offer seamless interoperability and interworking between Frame Relay and ATM.

- Direct Cell, OPTimum and NNI trunk support
- FRF.5 and FRF.8 NNI support
- Line and payload loopback support
- T1/E1 diagnostics
- Performance monitoring
- Redundancy support
- Cost-effective ATM access over existing copper

Carrier-class switches ensure high availability, reliability and scalability

Ascend products offer industry-leading scalability, high network availability and maximum reliability in mission-critical carrier-class environments through distributed routing, redundancy, hot swap and live insertion capabilities. Exceptional Quality of Service support with Priority Frame and Priority Reroute capabilities provide different levels of service for emerging Frame Relay applications. Superior architecture supports growing networks with leading edge hardware and shared software components. The powerful hardware architecture delivers exceptional scalability for high-bandwidth transmission environments or high port density configurations. Distributed switching and routing tables combine to furnish fast routing decisions.

- Fault tolerant Permanent Virtual Circuits and Switched Virtual Circuits
- Fast circuit setup and rerouting

Navis service management provides advanced network control

The Navis™ service management suite of powerful network management applications lets service providers deliver new networking services to business and enterprise customers more quickly and profitably. Sophisticated applications deliver add-on functions such as automated provisioning, accounting, service level agreements and real-time statistics monitoring. The Navis service management system offers exceptional management of Ascend networking nodes, using industry-standard TCP/IP protocols and builds seamless network management across Ascend core switching products for all network services: ATM, Frame Relay, IP private line

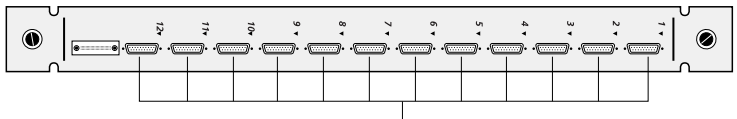
and ISDN. Navis provides a CLI for monitoring and configuring appropriate parameters and collecting performance statistics for Ethernet and asynchronous serial console connections. In addition, Web-based interfaces allow cost-effective customer network management.

- Integrated solution for complete control across the WAN
- Service Level Agreements
- Multiservice management from a single platform
- Extensive configuration, performance management and security support
- Fast and profitable delivery of new services
- Reduced operating costs

Specifications

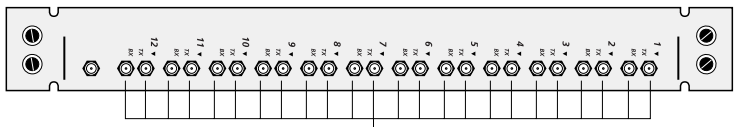
Dimensions	Size:	15 in x 1 in x 10 in [38.1 cm x 2.54 cm x 25.4 cm]
	Weight:	3 lbs [1.35 kg]
Power requirements	40 watts per card	
Environmental	Operating temperature: 32° – 122°F [0° – 50°C] Storage temperature: -40° – 158°F [40° – 70°C] Humidity: 5% – 95% (non-condensing) Altitude: -1000 – 3000 feet [-300 – 10,000 meters]	
Agency certification	FCC Part 15 Class A EN50021, EN55022, EN60950, EN61000 UL 1950	
NEBS compliance	GR-63-CORE GR-1089-CORE	
Telecom approvals	CTR 12 FCC part 68 Austel (TS001, TS016)	
Physical interfaces	Twelve ATM UNI 3.0/3.1 T1 (1.544 Mbps) or E1 (2.048 Mbps) ports ATM Forum E1 Physical Interface Specification AF-PHY-0064.000-compliant ATM Forum DS1 Physical Interface Specification AF-PHY-0016.000-compliant One ITU/T G.703 Section 10 E1 external clock port One T1 external clock port (wire-wrap connector)	
Physical connectors	Twelve E1 2.048 Mbps interfaces; DB15 120-ohm or BNC 75-ohm connectors (transmit and receive) Twelve T1 1.544 Mbps interfaces; DB15 100-ohm	
Cell mapping	HEC Delineation (direct mapping)	
MIB support	RFC 1406 Standard T1/E1 MIB and Supplemental MIB supporting ANSI T1.231	

B-STDX 8000/9000 12-Port ATM T1/E1 Module back panels



12-Port ATM T1

DB15 Connectors



12-Port ATM E1

BNC Connector

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Ascend Communications, Inc. develops, manufactures and sells wide area networking solutions for telecommunications carriers, Internet service providers and corporate customers worldwide. For more information about Ascend and its products, please visit the Ascend Web site at http://www.ascend.com, or e-mail info@ascend.com.

Ascend markets the B-STDX, CBX, GRF, GX, IP, MAX, Multiband, MultiDSL, Navis, Pipeline, SA, SecureConnect and STDX families of products. Ascend products are available in more than 40 countries worldwide.

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