1-Port Channelized STM-1/E1 with IMA Physical Interface Module for the CBX 500® Multiservice WAN Switch



The 1-Port Channelized STM-1/E1 Physical Interface Module with Inverse Multiplexing for ATM (IMA) allows you to create a cost-effective, scalable service that provides interim ATM access between E1 and STM-1 to meet the growing bandwidth needs of your customers. With this module, you can increase the density of your existing E1 services to support more customers and generate more revenue opportunities without increasing your equipment footprint. This module also enables you to create cost-efficient network trunks in areas where STM-1 lines are not cost-effective or not available. With IMA, you can deploy additional E1 lines to help reduce facilities costs, enhance resiliency and add incremental bandwidth — without sacrificing ATM QoS, traffic management, or statistical multiplexing capabilities.

Applications

- Provide flexible ATM access services between E1 and STM-1 line speeds
- Increase port density of existing E1 services
- Connect to DSLAMs, wireless network access concentrators, CPE, and other Lucent or non-Lucent equipment
- Create cost-effective network backbone trunks between E1 and STM-1 lines

Features

- High port density, with support for 63 User to Network Interface (UNI) or Network to Network Interface (NNI) E1 ports per module
- Up to 30 software-configurable IMA bundles containing one to eight E1 links
- ATM Forum IMA v1.0 and v1.1 compliant
- Flow Control Processor to ensure network fairness and QoS

Benefits

- Offer customers custom bandwidth services between E1 and STM-1 lines for new revenue opportunities with minimal incremental investment
- Simplify operations by managing multiple low-speed physical lines as a single logical link
- Help reduce facilities costs by using multiple cost-effective E1 lines, instead of expensive E3 or STM-1 lines
- Help reduce operating costs and simplifies network management with *Navis*® network management software

Specifications

Description	Specifications
1. **Protocol Features Supported**	
SONET Interface Standards (STM-1):	• ANSI T1M1.3/92-005RI
Telcordia Bellcore:	• GR-253-CORE
	• ITU G.703 (electrical), G.709 (optical), G.957 (optical)
	• RFC SONET 1595
ATM:	• ATM UNI 3.0, 3.1
	• ATM TM 4.0
	• ATM Forum IMA v1.0 and v1.1
	• ATM Forum test specification af-test-0022.000

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Specifications *(continued)*

Description	Specifications	
2. **Network Synchronization**	External and internal Stratum 3	
3. **Operations, Administration and Maintenance**		
• Diagnostic internal test (DS1/DS3)		
• Diagnostic external test (DS1/DS3)		
• Line loopback (DS1/DS3)		
• Tx framed inband line loopback (DS1 only)		
• Tx unframed inband line loopback (DS1 only)		
• ESF FDL line loopback (ANSI, DS1 only)		
• Tx inband DS3 line loopback (FEAC)		
• Alarm monitoring		
4. **Network Management**		
Managed by *Navis*® Integrated Network Management Systems		
Performance monitoring through *Navis*Xtend®		
5. **Physical Dimensions**		
Size:	16 in x 1 in x 11 in (40.6 cm x 2.54 cm x 27.94 cm)	
Weight:	5 lbs (2.3 kg)	
Voltage:	65 watts (optical and electrical)	
6. **Environmental**		
Temperature range:	32° – 122° F (0° – 50° C)	
7. **Regulatory Compliance**		
Telecom:	FCC part 15 Class A	
Environmental/NEBS®:	GR-63-CORE, GR-1089-CORE, ETSI EN 300 019, ETSI EN 300386	
Safety:	UL® 60950, EN 60950	
EMC Emissions and Immunity:	EN 55022, EN 61000	
8. **Optical Interfaces**		
Property	Medium reach single mode, optical SC connector interface	
Physical Interface	4 UNI 3.0/3.1 cell bearing OC-3c/STM-1 155 Mbps ports (optical) 4 electrical G.703-based STM-1 155.52 Mbps ports (electrical)	
Physical Connector	SC connector	
Wavelength Operating Range	1261-1360nm	
Launch power (max)	-8dBm (max)	-14dBm (min)
Receiver power (max)	-8dBm (max)	-32.5dBm (min)
Maximum Distance	20km	

Specifications subject to change without notice. Contact your Lucent representative for information on availability and upgrades. Lucent reserves the right to change, modify, transfer or otherwise revise this publication without notice.

To learn more about our comprehensive portfolio, please contact your Lucent Technologies Sales Representative, Lucent BusinessPartner or, visit our web site at www.lucent.com or www.lucent.com/products/multiserviceswitching .

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