

Benefits and Features

- ❖ Low-cost T1 delivery from SONET core
- ❖ Smallest footprint in its class — just 1 RU
- ❖ 1:1 redundancy option for maximum protection
- ❖ Modules are hot-swappable without service interruption or the need for additional equipment
- ❖ Four clocking options (two external BITS, line, and internal)
- ❖ Advanced performance monitoring — path, section and line
- ❖ Universal chassis configurable for STS-1 or T3 applications
- ❖ Advanced management options, including SNMP and TL1 alarming and performance
- ❖ Plug-and-play architecture for fast, easy installation and scaling
- ❖ Non-interruptive, TFTP software downloadable
- ❖ NEBS level 3 certified
- ❖ Custom rack-and-stack configurations available

EdgeLink STS/T1 STS-1 SONET Access Solution



Compact, cost-effective service delivery from high-speed SONET networks

Today, many service providers are turning to SONET fiber networks to satisfy their customers' demand for greater speed, superior quality of service (QoS) and lower transport costs. To realize the advantages of SONET, however, you need access solutions at the network edge that enable easy, cost-effective, reliable delivery of T1 tariffed services.

Telco Systems helps you meet this critical need with our EdgeLink SONET access solution — EdgeLinkSTS/T1. EdgeLinkSTS/T1 reduces the cost and complexity of delivering T1 services off SONET backbone networks. It uses SONET drops to avoid expenses associated with tariffed TDM interfaces on add/drop SONET multiplexers and switches. This translates into a competitive edge for you.

EdgeLinkSTS/T1 SONET access solution is designed from the ground up for today's network environment. It features the industry's smallest footprint, making it ideal for cramped CPE, Co-location and Inter-office facilities. It's easy to install and maintain, with true plug-and-play architecture and remote management. And EdgeLinkSTS/T1 features the rock-solid reliability you've come to expect from Telco Systems for more than 25 years.

In today's evolving network landscape, EdgeLinkSTS/T1 SONET access product is the ideal solution for bridging legacy TDM networks with an expanding SONET fiber infrastructure.

Description of Product Technology

Cutting the Cost of T1 Service Delivery

EdgeLinkSTS/T1 provides a cost-effective solution for delivering T1 services off high-capacity SONET fiber rings and SONET-compatible switches. The cost of delivering T1 services from high-capacity SONET networks is dramatically reduced when add/drop multiplexers are populated with STS-1 modules and each STS-1 is broken down to T1s by the EdgeLinkSTS/T1. By providing a direct STS-1 interface for T1 delivery, EdgeLinkSTS/T1 further reduces costs by eliminating additional equipment and tariff additions. The ability to convert T1s to VT1.5s offers the flexibility to map them throughout your SONET backbone, eliminating stranded bandwidth. And it enables you to monitor T1 performance throughout the entire network.

Compact and Cost-effective

The EdgeLinkSTS/T1 is the industry's lowest-priced, 1:1 protected STS-1 multiplexer—and the most compact. It occupies just one rack unit (1RU), and its dense stacking capability allows you to install 30 units in a single rack. The result is maximum capacity, in the minimum space.

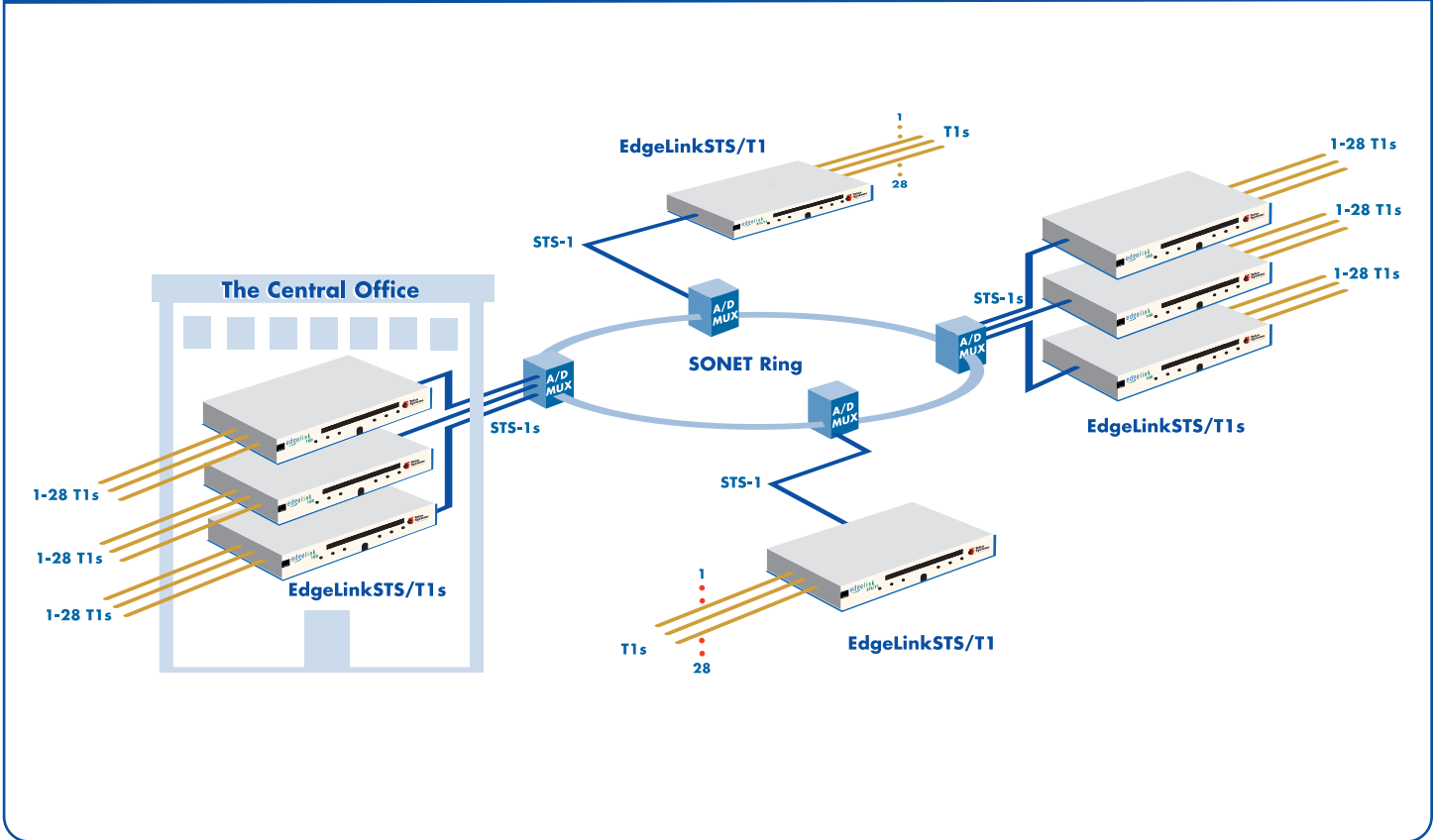
Easy Installation and Maintenance

True plug-and-play architecture reduces the time, cost and complexity of installing and configuring EdgeLinkSTS/T1. And it's designed for simpler maintenance and sparing, with just two card types. Cards can be replaced in minutes, without interrupting service.

True 1:1 Hardware Protection

EdgeLinkSTS/T1 features 1:1 card redundancy, ensuring maximum service availability under all conditions. And, unlike competing products, it provides this 1:1 protection on both the high-speed and low-speed interfaces. EdgeLinkSTS/T1 modules are hot-swappable without service interruption or the need for additional equipment.

EdgeLink solutions provide easy, economical and reliable delivery of T1 services off high-capacity SONET rings.



Extended Performance Management

Remote, detailed performance monitoring enables easy, cost-effective monitoring of each T1 interface. Downloadable software enhancements allow you to keep EdgeLinkSTS/T1 at the leading edge quickly and easily, without any system interruption. EdgeLinkSTS/T1 also provides additional options for management which include: SNMP, TL1 alarming and performance, menu driven craft, PPP, and Telnet.

Custom Configuration Services

Count on Telco Systems for complete, customized telecommunications solutions that meet your specific deployment needs from Central Office to CPE and remote Co-location applications. Our team has the experience, knowledge and resources to create tailored solutions for any environment, including: rack-up assemblies, cabinet systems, outdoor cabinet systems, multi-vendor systems, wall-mount configurations and easy-mount equipment configurations. No matter what your network requirements are, Telco Systems can create a complete, custom solution that gives you the edge.

Specifications

T1 Interface

Number of Lines	Up to 28 per shelf
Line Rate	1.544 Mbps \pm 32ppm
Line Code	Selectable AMI/B8ZS (per channel)
AIS Line Rate	1.544 Mbps \pm 32ppm
Redundancy	1:1
Line Impedance	100 ohm, nominal balanced
Pulse Amplitude	2.4V to 3.6V
Cable	ABAM or equivalent
Span	655 ft. to cross-connect

STS-1 Interface

Number of Duplex Lines	1 per shelf
Line Rate	51.84 Mbps
Line Code	B3ZS (Bipolar three zero substitution)
Redundancy	1:1
Line Impedance	75 ohm, unbalanced
Pulse Amplitude	.45V to .90V
Cable	728A, RG-6/U, 734U, 735U
Span	450 ft. to cross-connect
Framing	STS-1
Performance Thresholds	User definable
Power Level	-2.7dBm to +4.7dBm

Interfaces

STS-1	BNC, male
T1	64 pin Amp, female
Craft/Modem/PPP	8 pin modular, female
Ethernet/Telnet	10Base-T
Alarm Contact	Wirewrap
Power	Dual feed terminals

System Management

Embedded SNMP Management
 TELNET
 PPP
 TL1 Alarming and Performance Monitoring over TCP/IP
 IPM, Intermediate Performance Management (optional)
 Local Craft VT-100/ANSI Terminal (menu-driven)
 Office Alarms (Major, Minor, Critical, Far End)
 Status LEDs

Power Requirements

Voltage	-41.5 to -56.3 Vdc
Power Consumption	45 Watts maximum
Current Draw	0.75 Amps typical
Recommended Fuse	2-3 Amps

Clock Source

Local	
Loop	
External BITS	Dual external timing reference Auto-switching and reverting

Environmental

Operating Temperature	32°F to 104°F (0°C to 40°C)
Relative Humidity	Up to 90%, non-condensing
Altitude	Up to 10,000 ft. above sea level

Compliance

FCC Part Class A
 UL 1950
 CSA 22.2
 GR-499-CORE, GR-253-CORE
 GR-1089, GR-63 (NEBS Level 3)

Dimensions

Height	1.75" - 1 rack unit
Width	17.15"
Depth	12"
Weight	8 lbs fully loaded