Telco Systems
A BATM Company

EdgeLink100XT
Hardened DS3 Multiplexer

Benefits and Features

- Extended temperature operation -40°C to 65°C

- Optical DS3 option - up to 25 km

- Smallest footprint – only 1 RU

- NEBS Level 3 certified

- 1:1 circuitry protection and 1+1optical facility protection

- Hot insertion and card swap out

- Full SNMP and TL1 management

- In-band remote management over C-bit

- Internal loop back and line testing capabilities

- Menu-driven RS-232 interface

- Non-intrusive software upgrades

- Battery backup system (optional)

- Custom rack-and-stack configurations available

Industry's most flexible, scalable DS3 Multiplexer

As demand for bandwidth and services continues to rise at the edge of the network, so does the need for flexible, scalable products that will work in any environment. EdgeLink100XT delivers. It has the flexibility service providers need to deliver broadband services further out to the edge. Its DS3 optical functionality and its extended temperature rating enable it to be deployed in any environment.

Extended Temperature Operation

EdgeLink100XT is the only compact, 1 rack unit, DS3 multiplexer available and rugged enough to handle uncontrolled environments. It meets Bellcore GR-63 requirements for extended temperature operation and is the ideal service provider solution for environments with temperatures ranging from -40°C to 65°C.

DS3 Optical or Electrical Interface

Service providers all over the world have selected our electrical EdgeLink100 for their cramped co-locations, where bandwidth demands are high, but real estate is limited. The added flexibility of the optical module enables them to optically extend DS3 from a CO or POP up to 25 kilometers.   The combination of extended temperature support and optical delivery is a perfect solution for cell sites and remote terminals where bandwidth to provide enhanced services has exceeded T1, but doesn't warrant the cost of an OC-3. EdgeLink100XT gives service providers an alternative to their costly SONET equipment and to their bandwidth-limiting DS2 optical extension devices when pushing services deeper in to their networks.

EdgeLink100XT can be used in a point-to-point configuration delivering up to 28 DS1s, or used in conjunction with Telco Systems' DS3 electrical-to-optical media converter (EdgeLink-T3-E/O) to provide long-haul transport of DS1s from a CO DS3 DCS or switch port.

The proven, carrier-class EdgeLink100 with these added features make it the most flexible and complete DS3 multiplexer available.

Specifications

DS1 Interface

Number of Lines	Up to 28 per shelf
Line Rate	1.544 Mbps ± 32ppm
Line Code	Selectable AMI/B8ZS (per channel)
AIS Line Rate	1.544 Mbps ± 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 (50 ft in XT environments)

DS3 Electrical Interface

Number of Duplex Lines	1 per shelf
Line Rate	44.736 Mbps ± 20 ppm
Line Code	B3ZS (Bipolar three zero substitution)
Framing	P-Bit (M13) or C-Bit
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 (728A) (50 ft in XT environments)
Power Level	-2.7dBm to +4.7dBm

DS3 Optical Interface

Number of Duplex Lines	1 per shelf
Line Rate	44.736 Mbps ± 20 ppm
Line Code	Proprietary
Redundancy	1+1
Cable	1310nm single mode
Span	25 Km
Loss Budget	Dynamic range 31dBm
Power Level	-8dBm to -15dBm

Interfaces

DS3 Electrical	BNC, male
DS3 Optical	SC connector
T1	64 pin Amp, female
Craft/Modem/PPP	8 pin modular, female
Ethernet/TELNET	10Base-T
Alarm Contact	Wire wrap
Power	Dual feed terminals

System Management

Embedded SNMP Management
TELNET
PPP
TL1 over TCP/IP or TELNET
Local Craft VT-100/ANSI Terminal (menu-driven)
Office Alarms (Major, Minor, Critical, Far End)
LAPD Messaging over C-Bit
Status LEDs
DS1 and DS3 Loop Back (Internal and NIU Generated)
BERT Testing and Monitoring

Power Requirements

Voltage	-41.5 to -56.3 Vdc
Power Consumption	Electrical 32 Watts maximum Optical 48 Watts maximum
Current Draw	0.75 Amps typical
Recommended Fuse	2-3 Amps

Environmental

Operating Temperature	-40°F to 149°F (-40°C to 65°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	13"
Weight	8 lbs fully loaded