

Edge Link 410

Features

- ❖ Time-slot level circuit grooming and backhaul
- ❖ Drop/Insert channels within a T1 or E1 line
- ❖ Fractional T1 or E1 transmission
- ❖ Consolidates traffic to minimize line costs
- ❖ Link redundancy
- ❖ Integrated T1 CSU's
- ❖ Unidirectional time-slot broadcast capability
- ❖ T1 or E1 splitting and time slot shifting for multi-service applications
- ❖ Performance monitoring and remote management via SNMP or a built-in remote access system
- ❖ Multipoint management control channel addresses several EdgeLink410 units using a single channel. Bandwidth costs are significantly reduced.



Compact Digital Cross-Connect Switch

Reduce T1 line costs by 50% or more

Telco Systems' EdgeLink410, a compact 4-port T1 or E1 digital cross-connect switch, is ideally suited to a variety of network applications. Any time-slot can be mapped to any other time-slot for fully non-blocked circuit routing. Advanced features include link redundancy, remote management and performance monitoring. For wireless applications, small size (1 rack mounting space x 12 inch depth) and front access to all connectors make EdgeLink410 suitable for the smallest cell site and base station installations. Additionally, a wide operating temperature range (-20°C to +70°C) makes EdgeLink410 the perfect choice for outdoor installations.

Cross-Connect Versatility

EdgeLink410 can cross-connect any 64 Kbps time-slot from any of its four ports to any other port. Non-volatile memory stores up to four routing configurations (1 active, 3 backup). Any routing configuration can be invoked immediately to respond to link failure, high error rate or time-of-day, providing protection switching functionality.

Flexibility = Value

EdgeLink410 offers unmatched flexibility for T1 and E1 transmission networks:

Specifications

Time-Slot Grooming and Backhaul

EdgeLink410 is the right product for minimizing T1/E1 line costs. Lightly loaded lines can be consolidated into a full line and circuits from multiple sites can be consolidated into a single line and backhauled to a main site. Many locations will contain several network elements, each requiring only a few channels. PBX's, voice messaging systems, routers, etc. can share the same T1 or E1 facility using EdgeLink410 to split the line and shift time slots to consolidate traffic.

T1 Interface

Line Rate: 1.544 Mbps, +/- 30 ppm
 Line Code: AMI/B8ZS
 Framing: D4, ESF, per TR54016 and TR62411
 Equalization: DSX-1, CSU line build out A,B,C
 Line Impedance: 110 ohm, balanced
 Synchronization: Internal, or external from any T1 port
 Performance Monitoring: ANSI T1.403, last 24 hours of data in 15 minute intervals Monitors all net work ports
 LED Alarm Indicators: Red (T1 Major Alarm), Yellow (T1 Minor Alarm)
 Alarm Contacts: Dry Form C, Major/Minor
 Connectors: RJ48C
 Loopback: Local and remote per T1 port generates and responds to Loop-Up and Loop-Down commands as defined in T1.403
 Regulatory: FCC Part 15, Class B FCC Part 68 DOC CS-03 UL 1950, CSA

E1 Interface

Line Rate: 2.048 Mbps, +/- 50 ppm
 Line Code: HDB3
 Framing: ITU G.704
 Equalization: up to 6 dB cable loss
 Line Impedance: 75 ohm, unbalanced or 120 ohm, balanced
 Synchronization: Internal, or external from any E1 port
 Performance Monitoring: ITU G.821
 LED Alarm Indicators: Red (E1 Prompt Alarm), Yellow (E1 Service Alarm)
 Alarm Contacts: Dry Form C, Prompt/ Service
 Connectors: BNC (75 ohm), RJ45 (120 ohm)
 Loopback: Local and remote per E1 port
 Regulatory: BAPT 221 ZV MU9, IEC 950 EN41003, EN5022 Class B, EN50082-1, EN5082-2, EN60950 CTR 12/13, NTR 4

Data Ports

Data Rate: Nx56/64 Kbps, N = 1 to 24 or 1 to 30 channels
 Interface: DCE synchronous V.35, RS449 and RS530 interfaces provided
 Connectors: DB37, with cables providing Winchester 37 pin (V.35), DB25 (RS530), DB37 (RS449)

System Management

Embedded SNMP Management
 PPP
 Local Craft VT-100/ANSI Terminal (Menu-driven)
 Office Alarms (Major, Minor)

Cross Connection

Routing Tables: 4 routing tables (1 active, 3 backup)
 Protection Switching: Upon T1/E1 alarm conditions, time-ofday or manual intervention

Power Requirements

DC Power Input: +/- 20 to +/- 60 VDC
 Power Consumption: 10 watts

Environmental

Operating temperature: -20° to +70° C
 Humidity: to 95% non-condensing

Dimensions

Height: 1.75 in. / 4.45cm
 Width: 17 in. / 43.2 cm
 Depth: 12.75 in. / 32.4 cm
 Mounting: 19 inch or 23/24 inch equipment rack
 LAN Interface: 10BaseT port, PPP port
 VT100: RS232 port, 9600 bps, RJ12 connector
 Remote Access: Via multipoint management channel (64 Kbps for SNMP, 9600 bps for VT100)
 Management channel echoed on all T1 ports.

AIRLINX Communications, Inc.
 Box 253
 Greenville, NH 03048
 E-mail: sales@airlinx.com
 Tel: (888) 224-6814
 Fax: (603) 878-0530