

Benefits and Features

- ❖ Highest density hub – up to 3 OC-3s, 9 STS-1s, or 9 DS-3s in a single unit
- ❖ Compact – only 5 RU
- ❖ NEBS Level 3 certified
- ❖ 1:N protection
- ❖ Hot insertion and card swap out
- ❖ Full SNMP and TL1 management
- ❖ Internal loop back and line testing capabilities
- ❖ Menu-driven RS-232 interface
- ❖ Non-intrusive software upgrades
- ❖ Standard 64 pin connectors for T1 drops
- ❖ Standard BNC connectors for DS3 and STS-1 drops and uplinks
- ❖ Custom rack-and-stack configurations available

EdgeLink Hub Multi-Service Distribution Hub



High density T1, T3, and STS-1 distribution hub from OC-3, DS3, or STS-1 uplinks

In order to offer competitive rates to their customers, service providers are continually looking for ways to reduce their operating and capital expenses by finding more economical ways to deliver services off their higher-order CO transport systems. Reducing rates and service delivery costs encompass everything from the most efficient utilization of available bandwidth in the core for traffic collection and fan-out, installation and turn-up, rack or real estate costs, ongoing maintenance, and equipment costs.

Telco Systems' EdgeLink Hub, multi-service distribution hub, packs all of the cost savings tools service providers need into a single, compact 5 RU platform. But where EdgeLink Hub is unique in the market is its added ability to hub up to 3 OC-3, 9 STS-1, or 9 DS3 drops off core transport equipment such as SONET add/drop multiplexers (ADM), digital cross connects (DCS) or C.O. switches without sacrificing drop port capacity. This enables service providers to achieve ROI faster when delivering high-density T1, T3, or STS-1 services. The drop ports are accessed via standard connectorized interfaces avoiding the need for adapter cables or additional rack space for special interface panels.

A single EdgeLink Hub requires only one IP address for complete OM&P, along with multiple options for management access that include SNMP, TL1, TELNET, and DCC over OC-3 (IP and OSI based). Two 10/100BaseT connectors are provided for daisy chaining shelves in a rack for single-line management accessibility.

Specifications

Transmission Specifications

DS1 Electrical Interface

Number of Lines	Up to 252 per shelf
Line Rate	1.544 Mbps \pm 32ppm
Line Code	Selectable AMI/B8ZS (per ch.)
AIS Line Rate	1.544 Mbps \pm 32ppm
Redundancy	1:N
Line Impedance	100 ohm, nominal balanced
Pulse Amplitude	2.4V to 3.6V
Cable	ABAM or equivalent
Span	655 ft. to cross-connect

DS3 Electrical Interface

Number of Duplex Lines	Up to 9 per shelf
Line Rate	44.736 Mbps \pm 20ppm
Line Code	B3ZS (Bipolar three zero substitution)
Framing	P-Bit (M13) or C-Bit
Redundancy	1:N
Line Impedance	75 ohm, unbalanced
Pulse Amplitude	.36V to .85V
Cable	728A, RG-6U, 735A
Span	450 ft. to cross-connect
Power Level	-2.7dBm to +4.7dBm

STS-1 Electrical Interface

Number of Duplex Lines	Up to 9 per shelf
Line Rate	51.84 Mbps \pm 4.6ppm
Line Code	B3ZS (Bipolar three zero substitution)
Framing	STS-1
Redundancy	1:N
Line Impedance	75 ohm, unbalanced
Pulse Amplitude	.45V to .90V
Cable	728A, 734U, 735U
Span	450 ft. to cross-connect (728A, 734U)
Power Level	-2.7dBm to +4.7dBm

OC-3 Optical Interface

Number of Duplex Lines	Up to 3 per shelf
Line Rate	155.52 Mbps \pm 32ppm
Fiber	Single Mode 1310nm
Span	15km IR
Redundancy	1+1
Receive Sensitivity	-36dBm
Power Level	-8dBm to -15dBm

Interfaces

OC-3	SFP
STS-1	BNC, female
DS3	BNC, female
DS1	64-pin Champ/AMP, female
Craft	RS-232, 9-pin female
Ethernet/Telnet	Dual 10/100Base-T, RJ-45 style
Alarm Contact	Wire wrap, 18 pins
Power	Dual wire terminals

General Specifications

System Management

Embedded SNMP Management
TELNET
TL1 over TCP/IP or TELNET
Local Craft VT-100/ANSI Terminal (menu-driven)
Office Alarms (Internal, External, Audible, Visual)
Status LEDs
DS1 and DS3 Loop Back (Internal and NIU Generated)
BERT Generation and Monitoring
DCC (IP and OSI Based)

Power Requirements

Voltage	-41.5 to -56.3 Vdc
Power Consumption	220 Watts maximum
Heat Dissipation	752 BTU/hr
Current Draw	5.3 Amps maximum
Recommended Fuse	7.5 Amps

Environmental

Operating Temperature	0°C to 50°C
Relative Humidity	Up to 90%, non-condensing
Altitude	Up to 13,000 ft. above sea level

Compliance

FCC Part 15 Class A
UL 1950
CSA 22.2
GR-499-CORE, GR-253-CORE
GR-1089, GR-63 (NEBS Level 3)
OSMINE (TIRKS/NMA)

Dimensions

Height	8.75" - 5 rack unit
Width	17.15"
Depth	10"
Weight	35 lbs fully loaded

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