

EdgeLink® Hub

Multi-service Distribution Hub



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.

The EdgeLink Hub, a multi-service distribution hub from Telco Systems®, packs all of the cost savings tools service providers need into a single, compact 5RU platform. But where the 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 or OSI based).

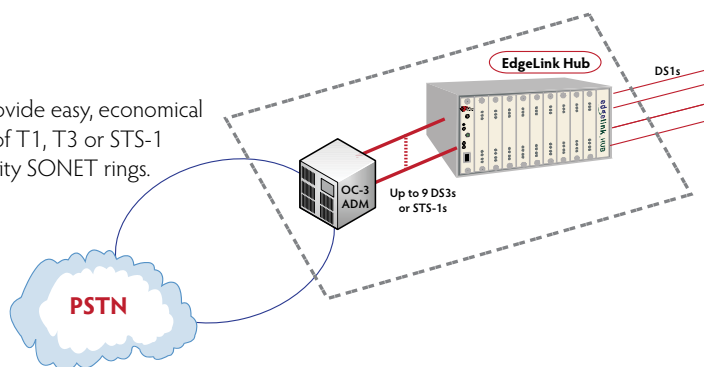
Two 10/100BaseT connectors are provided for daisy chaining shelves in a rack for single-line management accessibility.

- **Highest density hub – up to 3 OC-3s, 9 STS-1s, or 9 DS-3s in a single unit**
- **Compact – only 5 RU**
- **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**
- **Plug-and-play architecture for fast, easy installation and scaling**
- **NEBS Level 3 certified**
- **1:N protection**
- **Hot insertion and card swapout**
- **internal loopback and line testing capabilities**
- **Menu-driven RS-232 interface**
- **Standard 64 pin connectors for T1 drops**
- **Standard BNC connectors for DS3 and STS-1 drops and uplinks**

EdgeLink Hub

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

EdgeLink solutions provide easy, economical and reliable delivery of T1, T3 or STS-1 services of high-capacity SONET rings.



Key Applications

- Full SNMP and TL1 management
- Custom rack-and-stack configurations available
- Non-intrusive software upgrades

Specifications

Transmission Specifications

DS1 Electrical Interface

- No. of Lines Up to 252 per shelf
- Line Rate 1.544 Mbps \pm 32ppm
- Line Code Selectable AMI/B8ZS (per channel)
- ALS 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

- No. 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

- No. 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 +4.7dBmOC-3

OC-3 Optical Interface

- No. Duplex Lines Up to 3 per shelf
- Line Rate 155.52 Mbps \pm 32ppm
- Fiber Singlemode 1310nm
- Span 15km IR
- Redundancy 1+1
- Receive Sensitivity -36dBm
- Power Level -8dBm to -15dBm

Interface

- OC-3 SFP
- STS-1 BNC, female
- DS3 BNC, female
- DS1 63-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 32°F to 122°F (0°C to 50°C)
- Relative Humidity Up to 90%, non-condensing
- Altitude Up to 13,000 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)
- OSMINE (TIRKS/NMA)

Dimensions

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

Ordering Information

Part Number	Description
AXX317G3	Fully loaded for 9-M13 cards and one additional M13 traffic card, universal chassis
AXX317G4	Fully loaded for 9-ST5 cards, OC-3 ready, universal chassis
AXX317G5	Fully loaded for 9-M13 cards, OC-3 ready, universal chassis
AXX318G3	Universal hub chassis with common cards, no M13 cards
AXX318G4	Universal hub chassis with common cards for OC-3
CCA516G1	M13 traffic module
CCA541G1	OC-3 hub module (transceivers ordered separately-see below)
CCA546G1	STS-1 hub module
LTX010-1	SFP intermediate reach OC-3 transceiver, 1310nm, 15km
LTX011-11	SFP long reach OC-3 transceiver, 1310nm, 40km



Int'l Headquarters
 Tel: +972-9-866-2525
 Fax: +972-9-866-2500
 sales.emea@telco.com
 http://www.telco.com

US Headquarters
 Tel: +1-800-221-2849
 Fax: +1-781-551-0538
 sales@telco.com
 http://www.telco.com

Germany
 Tel: +49-241-4635490
 Fax: +49-241-4635491
 info@batm.de
 http://www.telco.com

France
 Tel: +33(0)1-567-12-773
 Fax: +33(0)1-437-71-780
 support@batm.fr
 http://www.batm.fr

Asia Pacific
 Tel: +65-6224-3112
 Fax: +65-6220-5848
 info.apac@telco.com
 http://www.telco.com

Japan
 Tel: +81(3)5215-5709
 Fax: +81(3)5215-5704
 info.jp@telco.com
 http://www.telco.com