Intraplex® AudioLink PLUS™

E1 System for Contribution/Distribution Networks

Solve Today's Challenging Content Transport Requirements - Radio engineers face the challenges of managing their broadcast program contribution and distribution and providing the highest degree of on-air reliability, while still controlling their costs.

The field-proven Intraplex® AudioLink PLUS™ E1 audio multiplexing system combines bidirectional transport of program audio with a wide variety of other traffic — including LAN/WAN data, telephone, intercom, fax, and remote control data — all over the same link. And the unique transmission robustness and error mitigation features of Intraplex provide users with unmatched reliability.

Get a Complete Range of Audio Options — and More
The AudioLink PLUS system offers the industry's widest range of plug-in modules for program audio, voice and data to combine virtually any mix of payload traffic for transport over E1. Program audio options include true uncompressed linear audio for the highest-quality sound and the lowest processing delay. Compressed audio options such as MPEG II, MPEG III, J.41 and Enhanced apt-X® allow you to increase bandwidth efficiency for consolidation of multiple audio channels and other payloads on the same link.

Data modules provide one-way or full-duplex data circuits, with a variety of data rates and formats for LAN/WAN, control circuits, program associated data and legacy devices. Voice modules transport voice-grade audio for telephone, inter-com and fax applications.

Whether over E1 land lines or microwave radios, the AudioLink PLUS system delivers superior audio quality and efficiency to broadcast stations and networks worldwide.

E1 and IP — Build for the Future
Intraplex AudioLink PLUS E1 multiplexers can be used in conjunction with Intraplex NetXpress™ IP multiplexers.

Together, they allow gradual migration from E1 to IP and enable the deployment of hybrid E1/IP contribution and distribution networks that share a common family of audio interface modules.

Product Features

- **Intraplex E1 technology**
  AudioLink PLUS is the latest generation of Intraplex, continuing the tradition of unsurpassed reliability and state-of-the-art technology, while maintaining compatibility with earlier generations of Intraplex E1 systems. Hot-standby redundant power supplies and advanced E1 error mitigation techniques provide enhanced transmission robustness, making AudioLink PLUS a system you can rely on for years to come.
- **Audio transport**
  With AudioLink PLUS, uncompressed audio occupies just over half of the E1 bandwidth, leaving plenty of room for additional traffic in each direction. A wide selection of compression options, including Enhanced apt-X®, MPEG-2, MPEG-3, J.41, and G.722, allows the carrying of multiple audio channels on a single E1. Audio I/O is either analog or AES/EBU digital, while sample rates ranging from 16 kS/s to 48 kS/s provide for audio bandwidth options from 7 kHz up to 20 kHz and beyond.

- **Telephone links**
  A full range of telephone interface options allows the AudioLink PLUS to support a variety of telephone and other voice-grade audio applications, including 2-wire and 4-wire E&M for linking PABXs and KSUs, Off-Premise Extension (OPX) circuits that allow you to connect a telephone handset at the transmitter site to a PBX at the studio as if it were in the next room, and open 4-wire circuits to support talkback and intercom systems with both standard (3.4 kHz) and wideband (7 kHz) voice quality, as well as FSK tones for use with telephone keypad-operated remote controls.
- **Data circuits**
  The industry's most extensive array of data interface options allows you to set aside part of your E1 to create a LAN bridge, carry IP data traffic, and link to virtually any type of control and data storage equipment. Available synchronous and asynchronous interfaces include RS-232, RS-449, V.35, X.21, TCP/ IP, UDP, TTL and more.

+1.800.622.0022

Specifications

Specifications and designs are subject to change without notice

General	
A typical shelf configuration consists of 1 chassis, 1 power supply, 1 or 2 CM-7RB E1 interface modules, and 1 or 2 module adapters (MAs), 1 for each CM-7RB. See E1 Inputs/outputs for MA options. Audio, voice, and data modules and redundant compo-nents are optional.	
Shelf Configurations	ADL-263 E1 terminal multiplexer contains 1 CM-7RB module with MA ADL-265 E1 drop and insert multiplexer contains 2 CM-7RB modules with MAs, configured for drop and insert or drop and continue operation ADL-266 E1 dual terminal multiplexer contains 2 CM-7RB modules with MAs, configured as 2 independent terminals sharing the same chassis
Module Compatibility	Accepts Intraplex plug-in audio, voice, and data modules. See individual module specifications for details and applications
E1 Specifications	
Inputs/Outputs	Depends on the MA selected. Options are: MA-215: 1 RJ-48C connector, 120 ohms MA-217A: 2 BNC connectors, 75 ohms
Frame Formats	Channel Associated Signaling (CAS) Common Channel Signaling (CCS) Per ITU G.703, G.704 and G.706
Line Codes	High-Density Bipolar Order 3 (HDB3) Alternate Mark Inversion (AMI)
Timing	Internal, 2,048 Mbs ±30 ppm output External, RS-422 clock input Loop
Redundancy	2 levels of E1 redundancy are available: For E1 module redundancy where only 1 E1 circuit is available, a second CM-7RB module can be added that connects to the same MA as the primary CM-7RB For E1 line and module redundancy where 2 E1 circuits are available, the system can be equipped with 2 CM-7RB modules and an MA-235 set, which contains 1 each MA-235-1 and MA-235-2, replacing the standard MA (available with RJ-48C connectors only)
Status and Diagnostics	
LED Indicators	Power, normal, alert, alarm
Alarm Reporting	Major (alarm), minor (alert), NO/NC relay contacts
Loopbacks	Line loopback, equipment loopback, payload loopback
Test Access	Bantam jacks for E1 input/output signal and E1 input/output monitoring
Remote Access and Control	
User Interface (Standard)	Remote programming and monitoring using ISiCL (ASCII command-line interface), or Windows®-based IntraGuide® configuration and management software, which is provided with every system. IntraGuide® software updates are available to Intraplex customers from the GatesAir customer support site at http://ecustomer.broadcast.GatesAirbroadcast.com. Interface via RS-232 C and RS-485 asynchronous data connection In-band E1 access to far-end AudioLink PLUS system(s) via ISiCL or IntraGuide®
User Interface (Optional)	When equipped with an SCM-IP control module, the system is accessible via IP and can be controlled by any SNMP v2-based network management system. SNMP MIBs available upon request.

Physical and Environmental	
Power Requirements	Universal AC 90 to 240 VAC, 50/60 Hz, 48 VDC, 24 VDC
Power Supply	Single or redundant, 60 W AC, 100 W AC, 50 W 48 VDC, 50 W 24 VDC
Power Consumption	Depends on modules installed, less than 40 W typical
Temperature	32° to 122° F (0° to 50° C) operating
Humidity	10% to 90% noncondensing
Dimensions (H X W X D)	3RU: 5.25 x 19 x 14.75 in. (13.4 x 48.3 x 37.5 cm) EIA rack mountable
Standard Shipping Carton	
(contains one 3RU shelf)	15 x 20 x 22 in. (38 x 50 x 56 cm)
Shipping Weight	Depends on modules installed, less than 25 lbs (11.4 kg) typical
Regulatory Compliance	CE Approved, CTR – 12 and 13, FCC Part 15, UL 1950, RoHS-compliant