Data Sheet

Mega-T

Multiple T1 Inverse Multiplexer

The Mega-T Multiple T1 Inverse Multiplexer bridges the gap between T1 and T3. Inverse multiplexing up to four T1 lines, Mega-T creates a single logical data channel which is the sum of the T1 bandwidths.

On the DTE side, Mega-T provides an EIA530 (V.35/RS449) or HSSI port operating at data rates in multiples of 1.344 or 1.528 Mbps, up to 6.112 Mbps. On the network side, T1 interfaces support all standard framing and coding formats and include optional built-in CSUs.

To ensure that your communication link remains available if an individual T1 line does not meet your performance requirements, Mega-T can automatically fall back to a lower data rate. Mega-T can automatically restore a dropped T1 line when performance again meets your requirements.

Mega-T includes advanced monitoring and alarm functions to help you maintain your critical communication channels. And built-in diagnostics ensure that you can isolate problems quickly and accurately.

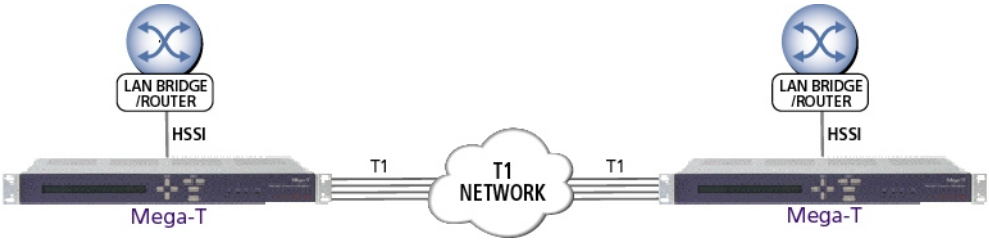
APPLICATIONS

- LAN/WAN interconnection
- Channel networking extension
- Graphics and image transmission
- Broadcast-quality video
- Disaster recovery and backup

BENEFITS

- Economical access to greater-than-T1 bandwidth for high-speed applications
- Direct connection to V.35- and HSSI-compatible equipment
- Complete visibility of T1 and DTE channel performance
- Rapid trouble notification, isolation, and recovery
- Integral SNMP agent
- 125 milliseconds differential delay

LARSCOM



Here, the Mega-T inverse multiplexes 4 T1 lines to create a high-speed 6.112 channel for a LAN internetworking application. The public network can be accessed directly through T1 access lines, as shown, or through an M13 multiplexer and T3 access line.

SPECIFICATIONS

FEATURES

Protocol Independent — Integrates into almost any application, regardless of the protocols, the data being transmitted, and the network equipment

Automatic Rate Fallback and Recovery — If a line fails, Mega-T automatically falls back to a lower data rate, and automatically restores the dropped line

Management — Terminal interface with local and remote access; integral SNMP; menu-driven front-panel LCD; advanced performance monitoring and diagnostics

INTERFACES

Network — 2 or 4 T1 ports
Rate — 1.544 Mbps ±50 ppm
Framing — D4 or ESF
Line Coding — AMI or B8ZS
Electrical — Per AT&T Pub 62411
Surge Protection — 1000 V pulse per AT&T Pub 43602; cross-voltage protection per Ul1459 (Issue 2)
Connectors — Four DA15; adapters for RJ48 and wire wrap (up to 655 feet for DSX-1)
DTE Data Ports — Two or four HSSI (differential ECL) or HSD (CCITT V.35 – V10/11 – and/or RS449)
Interface Type — HSSI: SCSI-II 50-pin female connector; HSD: DB25 female connector (EIA530); adapters for MS34 (V.35) and DC37 (RS449)
Data Rates — Any multiple of 1.344 (when 7-bit stuffing is employed) or 1.528 Mbps, up to 2.688/3.056 Mbps (2T1s) or 5.376/6112 Mbps (4 T1s)
Station Clock Input — TTL Levels; 50 ohms impedance; BNC connector

INVERSE MULTIPLEXING

DS1 Alignment Algorithm — 1 to 4 DS1s user-mapped in any pattern
Idle Pattern — All ONES on DTE port loss
T1 Differential Delay — Up to 125 milliseconds

MANAGEMENT INTERFACES

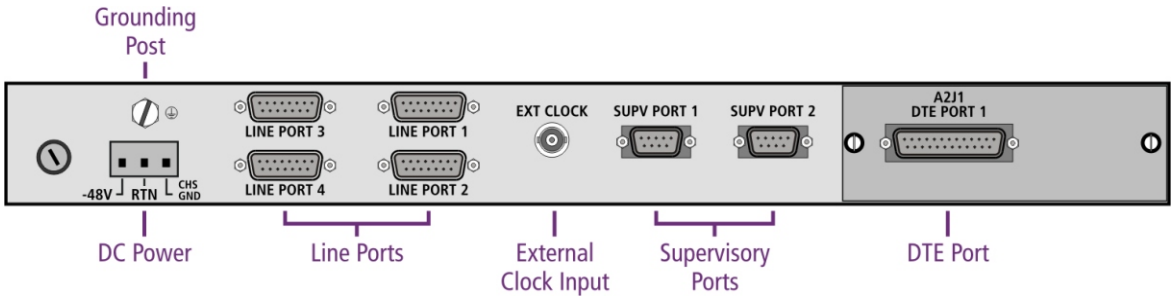
Front Panel — Menu-driven, 80-character LCD, 8 entry keys, 4 LED status indicators
Local/Remote Port — Two RS232 ASCII, to 9600 baud; DE-9 (EIA574) male connectors
SNMP — Connection via SLIP; integral agent per RFC 1406

MONITORING AND DIAGNOSTICS

Performance Registers — Per AT&T Pub 54016 (Issue 2), plus additional 24-hour registers for logical channel
Alarms — Automatic dialout on user-specified alarms (Hayes-compatible dialer); automatic rate fall back on selected alarms; optional automatic restoral
Loopbacks — Per AT&T Pubs 62411 and 54016, plus local/remote DTE and logical channel loops.

GENERAL

Power — -48 V dc office battery (-43 to -53 V dc); standard 115 V ac, 50 to 60 Hz; 0.5 Amax at -48 V, 0.5V peak-to-peak rippled at maximum input current
Dimensions — (H x W x D) 1.75 x 17 x 12 inches; 4.4x 43.2 x 30.5 cm, brackets for 19- or 23-inch rack
Environment — 0 to 50 ºC (32 to 122 ºF) ambient; up to 95% relative humidity, non-condensing
Regulatory Compliance — FCC Parts 15 & 68; UL 1459 (Issue 2)



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