E1and T1 Fibre Muxes

Multiplex 4 E1 or T1 channels

Key Features

- Multiplex four T1 or E1 lines onto one duplex fibre optic line.
- Models available for multimode and single mode fibre.
- Single-mode models have a range of up to 48 Km (30 miles).
- Full-duplex voice service channel.
- Comprehensive diagnostics and testing.
- One method of management

Specifications

Local & Remote Loops
Voice Call Indicator and Buzzer

Connections

Link Port — Fibre optic interface (2) ST fibre connectors
Fibre Link — (1) pair of ST
E1 Channels — (4) RJ-48C, (8) BNC (F)
Control Port — async RS 232/V.24 on (1) 9-Way D-Type
Voice Port — Jack Socket for included Headset

Management

Indicators — Comprehensive System and Channel Status LEDs
Supervisor Port — RS-232, VT100 Local and Remote Management Power Up Self Test including

Engine (Multiplexer)

Technology — TDM multiplexer and fibre converter
Data Rates — E1 Ports 2.048 Mbps
Line Code — HDB3
Range — Multi Mode - 11km, Single-mode – 48 Km

Operating Environment

Operating Temperature — 0° to +50° Celsius
Power — 100-230V, 50-60Hz, 24W redundant autosensing
Size — 4.5H x 43.2W x 20.8D cm
Weight — 2.0 Kg

Combine four T1 or E1 channels over a single pair Fibre optic link with a pair of these Fibre Muxes. The new muxes offer simple and low-cost connectivity at distances up to 48 km (30miles)!

With Fibre optics, your E1 digital communications also receive the benefits of security, immunity against EMI and RFI, and protection against the harmful effects of ground loops.

The MT1000A-85 and MT1000A-E1-85 use 62.5-/125-µm multimode Fibre optic cable. The MT1000A-13 and MT1000A-E1-13, however, use 9/125µm Single-mode fibre.

Each of the four E1 (or T1) ports has its own set of indicators that shows link status. If you have fewer than four lines running into a mux, you can disable alarm indications normally generated by an unused port.

These E1 or T1 Fibre Muxes also provide a full-duplex voice service channel that enables operators on both ends of the Fibre link to communicate with each other. Just plug the included headset into the mux's front panel, push the Call button to buzz the person on the other end of the line, and talk! Voice communications operate independently of payload traffic, so the data still goes through as fast as ever while both people coordinate maintenance activities.

Comprehensive diagnostics and testing are included—there's an automatic self-test on power-up to local and remote loop backs. Manage the mux by connecting its RS-232 port to an ASCII terminal.

Ordering Information

Item	Code
E1 Fibre Muxes	
E1 Fibre Mux Multimode 850-nm	MT1000A-E1-85
E1 Fibre Mux Single-mode 1300-nm	MT1000A-E1-13
T1 Fibre Mux	
T1 Fibre Mux Multimode 850-nm	MT1000A-85
T1 Fibre Mux Single-mode 1300-nm	MT1000A-13

BLACK BOX®
NETWORK SERVICES

Modular Fibre Muxes

Connectivity the way you want it.

Key Features

- Mix and match modules to create a solution that's right for your network.
- Up to three autosensing Fast Ethernet Modules for 10/100 Mbps connectivity.
- You can also choose up to three T1 or E1 Modules, each with four ports.
- Module for 75 ohm unbalanced E1 connection available.
- Rackmount Kit available.
- Two modules for fibre link

You choose the configuration

Just wait until you see what flexibility and versatility the user-configurable E1 and T1 Fiber Muxes XL offer!

Start off with a pair of our E1 (or T1) Base Units. Each unit is available with an AC or a DC power supply and features a fixed 10BASE-T port for Ethernet connectivity. Populate the muxes with the modules you need. Choose between two Fiber Modules for your link, then decide if you want a module to connect to Fast Ethernet. Next, add the appropriate E1 or T1 Modules. For complete flexibility we even have modules for either balanced or unbalanced E1 connection!

Easy to manage

Setup, monitoring, and diagnostics can be configured using an ASCII terminal,Telnet™ SNMP Management Station. System diagnostics are monitored and managed using status and alarm indicators, alarm dry contacts, and an ASCII terminal.

Specifications

Connections

Fixed Ethernet Port — (1) RJ-45
Control Port — async RS-232/V.24 on (1) DB25 Alarm (1) DB9 F
Modules Interfaces —
Fibre Modules: ST connectors
Fast Ethernet: RJ-45
E1: RJ-48 C or BNC for E1
T1: RJ-48 C

Management

Indicators — Status LEDs
Supervisor Port — RS-232, ASCII and Telnet access enable remote diagnostics and management
Alarm indicators and relay contacts

Engine (Multiplexer)

Technology — TDM multiplexer and fibre converter
Data Rates — HDB3 (for E1 modules)
Range — Multimode – 2.5 Km, Single-mode – 40 Km

Operating Environment

Operating Temperature — 0° to +45° Celsius
Power — 90-260V, 47-63Hz, Redundant autosensing
Optional – 48V DC redundant power supply
Size — 45H x 43.2W x 26.7D cm
Weight — 2.3 Kg

Ordering Information

Item	Code
Price	
E1 Modular Fibre Mux - Base Unit	
E1 Modular Fibre Mux Base Unit AC Power	MT1060A-E1
E1 Modular Fibre Mux Base Unit DC Power	MT1060A-E1-DC
E1 Modular Fibre Mux - Modules	
Multimode 850-nm	MT1061-85
Single-mode 1300-nm	MT1062-13
E1 4 Channel Balanced (120 ohm), R-J45	MT1064-4E1
E1 4 Channel Unbalanced (75 ohm), (2) BNC	MT1064-4E1-UB
Fast Ethernet (10/100 Mbps)	MT1065-FETH