



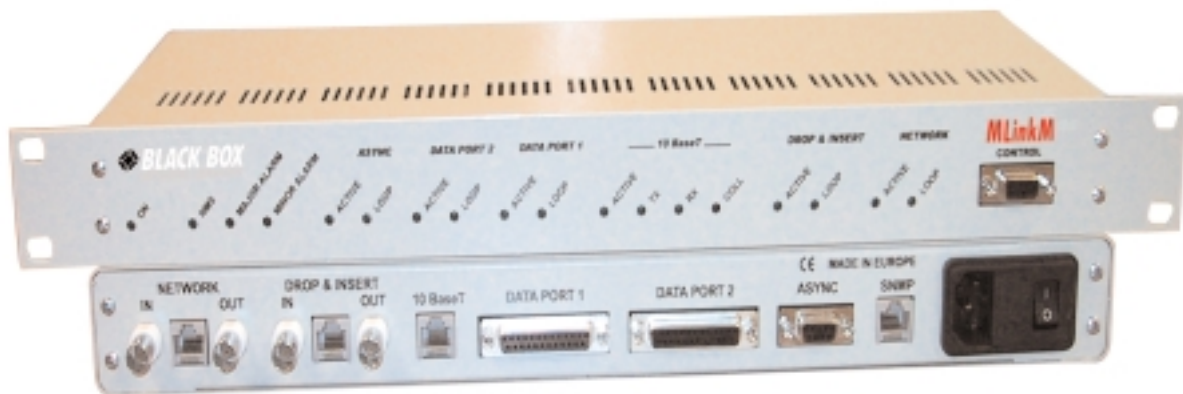
BLACK BOX[®]

NETWORK SERVICES

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Black Box Corporation.

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MLINKM



One of the most versatile muxes available today

Key Features

- ▶ **Share your PBX, high speed routers, Ethernet and traditional asynchronous equipment over a single 2.048Mbps E1 link.**
- ▶ **Complete with G.703/G.704 N x 64K Drop and Insert port**
- ▶ **User configurable bandwidth**
- ▶ **Supports both Local and Remote management**
- ▶ **Built-in SNMP Agent available**
- ▶ **AC and DC power supplies available**
- ▶ **Built in diagnostics and loopback tests**
- ▶ **2 User configurable Data Ports N x 64K V.35/V.3/X.21/V.24/RS449/RS485**

The Black Box Network Services MLINKM multiplexer, has been designed to be one of the most flexible Time Division Multiplexers (TDM's) available today.

Transmit all your data, such as Voice, Data and Video through one E1 line, 2.048Mbps DSL, radio, laser or microwave link, or in fact, any service that is compatible with a 2.048Mbps G.703 line.

The Black Box MLINKM has all the capabilities you need to make the most of your WAN (Wide Area Network) circuit. The unit has a built in Ethernet 10Base-T port, and can learn up to 15,000 addresses for use with its bridging functionality. It also has the ability to filter and compress data to increase efficiency.

The E1 drop and insert port allows for devices such as PBX's,

external routers or secondary E1 uplinks to be utilised with user definable Time Slot allocation of the port. The port is fractional E1 and so supports data rates of 64K to 1.984Mbps in n x 64K steps. It has both 75 ohm BNC's and 120 ohm RJ45 connections.

The two synchronous ports can be software selected to appear as X.21, V.35, V.24, V.36, RS422 or RS449, and support all n x 64K speeds from 64K to 1.984Mbps. The clocks may be configured for either Master or Slave mode.

The asynchronous port is a V.24 port supporting standard bit rates up to 56,000bps, and uses V.110 rate adaptation to fit into a 64K Time Slot.

The unit can be configured from the V.24 console port using the standard DCE DB9 way female connector, or by SNMP

management if the agent is installed. SNMP conforms to MIB 11 (RFC1213) and will support E1 MIB (RFC1406) and Enterprise MIB, using the RJ45 Ethernet port.

Diagnostics are available in the form of local, remote, terminal and data loopbacks with full performance monitoring of the last 24 hours of use in 15 minute

intervals and the last 7 days in 25 hour intervals.

Loopbacks can be provided on each port, enabling easy end to end testing of either just one port, or the whole unit.

The devices use a proprietary HDLC protocol between them and so will not work back to back with other manufacturers multiplexers.

Specifications

Network Interface

Line Rate: 2.048Mbps +/- 50ppm

Line Code: HDB3 or AMI

Impedance: 120 ohm RJ45
Balanced or 75 ohm BNC's
Unbalanced

Connector: RJ45 (120 ohm balanced), two BNC's (75 ohm unbalanced)

Frame Format: ITU G.704

Jitter: ITU G.823

Pulse Shape: ITU G.703

Drop and Insert

Line Rate: 2.048Mbps +/- 50ppm

Line Code: HDB3 or AMI

Impedance: 120 ohm RJ45
Balanced or 75 ohm BNC's

Unbalanced

Connector: RJ45 (120 ohm), two BNC's (75 ohm)

Frame Format: ITU G.704

Jitter: ITU G.823

Pulse Shape: ITU G.703

10Base-T Interface

Speed: 10Mbps

Interface: RJ45

Built in Bridging with Auto Learning of up to 10,000 addresses.

Selectable compression and filtering to increase efficiency

Data Port Interface

Bit rate: 64K to 1.984Mbps (n x 64K)

Electrical: V.24 (V.28), X.21 (RS422), V.11 (RS449), V.35, V.36 Software selectable

Connector: 25 pin D type Female configured as DCE

Clock: Internal or Slave

Async Port

Bit Rate: up to 56000bps

Async Format: software selectable

Electrical: V.24 / RS232

Bit Rate Adaptation: V.110

Alarms

SNMP Traps via Ethernet Port (optional)

LED indicators

LED Indicators

General: Power, Management, Major Alarm and Minor Alarm

Network Port: Active, Loop

Drop and Insert Port: Active, Loop

10Base-T Port: Active, LAN TX, LAN RX, Collision

Data Port: Active, Loop

Async Port: Active. Loop

Performance Monitoring

Last 24 hours of data in 15 minute increments

Last 7 days of data in 24 hour increments

Size: 1U 19" rackmount case (425mm x 163mm x 42mm)

Environment: 0 to 60 degrees Centigrade, 5% to 90% RH non condensing

Power Supply: AC: 220Volt , DC: -48 Volt D.C

Ordering Information

ITEM	CODE
MLINKM 2Mbps E1 Multiplexor AC Power Supply	MXU2111
MLINKM 2Mbps E1 Multiplexor DC Power Supply	MXU2111DC
G.703 Cables	
Duplex G.703 Cables (Siamese) 2-m	ETNU703-2M
Duplex G.703 Cables (Siamese) 3-m	ETNU703-3M
Duplex G.703 Cables (Siamese) 5-m	ETNU703-5M
75 ohm TYPE 43 to BNC Adaptor Cables 1.8-m.....	EVUT43-0006
75 ohm TYPE 43 to BNC Adaptor Cables 3-m.....	EVUT43-0010
Straight Pinned DTE Interface Cables X.21	
15pin male to 15pin male 1-m.....	EVNX21-001M-MM
15pin male to 15pin male 3-m.....	EVNX21-003M-MM
15pin male to 15pin male 5-m.....	EVNX21-005M-MM
15pin male to 15pin male 10-m.....	EVNX21-010M-MM
15pin male to 15pin female 1-m.....	EVNX21-001M-MF
15pin male to 15pin female 3-m.....	EVNX21-003M-MF
15pin male to 15pin female 5-m.....	EVNX21-005M-MF
15pin male to 15pin female 10-m.....	EVNX21-010M-MF