



# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

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## MTU400 E1 Converter

*Conversion for E1,  
Fractional or Transparent  
Operation.*



### Key Features

- ▶ G.703 and G.704 support.
- ▶ E1, Fractional E1 and Clear Channel Operation
- ▶ Flexible E1 and Data Clock Sources.
- ▶ Onboard G.703 BERT.
- ▶ Statistics and Diagnostic Loop backs.
- ▶ Simple configuration with provided buttons and LCD display.
- ▶ Unrestricted timeslot allocation.

### Specifications

#### Connections

**Link** — (2) BNC Connectors 75 ohm unbalanced and (1) RJ45 120 ohm balanced  
**Data Channel** — X.21/V.11 or V.35 configured as DCE on DB15F

#### Management

**Indicators** — (2) Line, (16) Character LCD display plus LEDs  
**Front Panels Controls** — (4) push buttons

#### Engine (Converter)

**Data Rates** — G.703; 2048 kbps  
 G.704; 0 – 1984 Kbps in N x 64Kbps steps  
**Compliance** — G.703, G.704, G.823, PD7024, CTR12, CTR13, EN300386, EN60950, CE

#### Operating Environment

**Operating Temperature** — 0° to +4°0 Celsius  
**Power** — External 5V, 500mA- Input 230VAC  
**Size** — 4H x 14W x 11D cm  
**Weight** — 0.3 Kg excluding external power supply

### Powerful timeslot allocation

The MTU400 is a single channel unit allowing G.703 or G.704 to X.21/V.11 or V.35 rate and interface conversion. Any N x 64 Kbps (to 2048 Kbps) X.21/V.11 or V.35 DTE device can be connected to a G.703 or G.704 link. The unit can run transparently at 2048Kbps, or as low as 64Kbps if required, and can be configured to use any combination of timeslots.

The unit is simply configured using the 4 buttons and LCD display provided on the front of the unit.

### Full choice of clocking

Flexible clocking options allow the unit to be configured to work in a wide variety of applications. As well as being able to loop network clock, a fixed internal clock is available for when an unclocked network is being

used, and the MTU400 can also be configured to clock the network from the data port. The data port transmit and receive clocks can be independently set to internal or external to help solve many common clocking problems.

### Easy to manage

The comprehensive suite of diagnostics options provided include a G.703 BERT facility, local and network loop backs and the ability to send and respond to standard loop up and loop down codes. This allows an engineer at one end of a link to put the remote MTU400 into network loop and run a BERT test across the link thereby testing the link without the need to send an engineer to the remote site.

The MTU400 also maintains a running average count of CRC, BPV and FEBE errors.

## Ordering Information

Item	Code
MTU400 E1 Converter	
MTU400 E1 Converter	MTU400



#81202