BLACK BOX® ®
NETWORK SERVICES

ASYNC MINI FIBre OPTIC MODEMS

PATT
DIG
ANA
REM
○ TD   ○ RTS
○ RD   ○ DCD
○ ERR ○ TST

Transmit an RS-485 signal via a fibreoptic link.
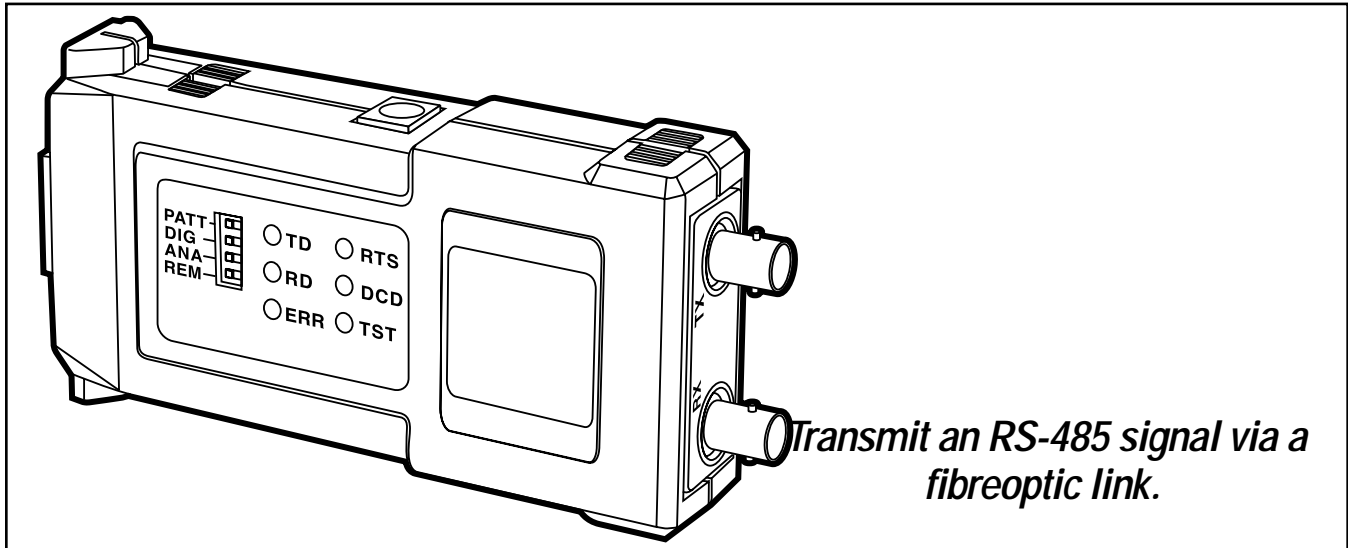
Key Features

▶ *Async transmission up to 115.2 kbps.*

▶ *Operates full duplex over 4-wire; half-duplex over 2-wire or 4-wire.*

▶ *Meets ITU RS-485 requirements.*

▶ *Operates over multimode or single-mode fibreoptic cable.*

▶ *Point-to-point or multipoint applications up to 32 units in RS-485.*

▶ *Miniature, lightweight, and easy to install.*

Perfect for utility applications such as the one shown in the diagram on page 2, the Async Mini Fibre Optic Modem can transmit an RS-485 signal via a fiber optic link. The asynchronous data rate can be up to 115.2 kbps in full- or half-duplex mode.

The Modem performs diagnostic loops in compliance with the ITU V.54 standard. Two V.54 loops are available: local analog loop (loop 3) and remote digital loop (loop 2). The loops are activated by external DIP switches on the top of the Modem. Local digital loop is also available.

The Modem includes a built-in V.52 standard BER tester which is also activated by an external DIP switch on the top of the modem.

Async Mini Fibre Optic Modems models are all RS-485 with ST connectors. Select 115- or 230-VAC modems that work with 850-nm multimode or 1300-nm single-mode fibre optic cable.

The Modem derives its power from a standard wall-mounted DC power supply adapter. The DC voltage range is 300 mA to 9 V.

All the advantages of a fiber optic system are yours with the Modem:

• Lower attenuation than with copper wire.

• EMI/RFI immunity, saving the cost of expensive and heavy shielding, and complex error-checking routines.

• Almost absolute security; you save money otherwise spent for data encryption.

• Protects against eavesdropping, since negligible power radiates from the fiber.

• Safety and electrical isolation: no spark hazard and no ground-loop problems.

Installing the modem is easy. Simply set a couple of switches and jumpers for full or half-duplex, 4-wire or 2-wire operation, and carrier delay. Six diagnostic LEDs tell you modem status at a glance.

Typical Application
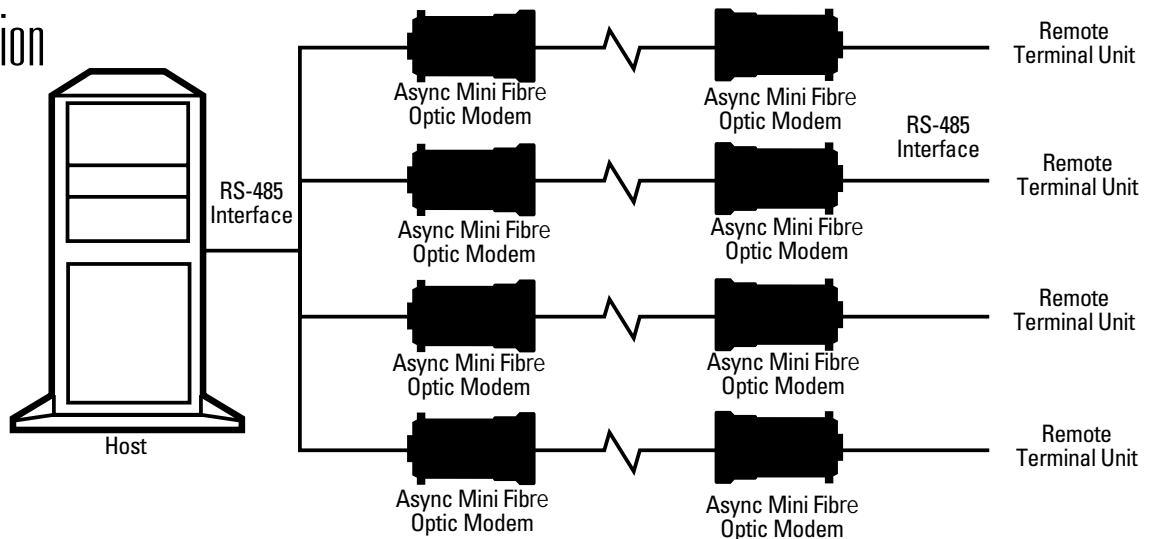
Specifications

DTE Link

Data Rate: Up to 115.2 kbps

Pulse with Distortion: Less than 25%

Transmission Mode: Full- or half-duplex, switch-selectable

Interface Type: RS-485 over 2- or 4-wire, switch-selectable

DTE Connector: (1) 5-screw terminal block

Fibre Optic Link

Transmission Line: Optical duplex cable

Transmission Mode: Full- or half-duplex

Optical Output Level: -18 dBm over 62.5/125-μm fibre; -18 dBm over 9/125-μm fiber

Optical Wavelength: ME615A, ME615AE: 850 nm, multimode; ME616A, ME616AE: 1300 nm, single-mode

Fiber Optic Connectors: (1) pair of ST®

General

Operating Budget: ME615A, ME615AE: Up to 22 dB in full duplex; ME616A, ME616AE: Up to 24 dB in full duplex

Temperature Tolerance: 32 to 122°F (0 to 50°C)

Humidity: Up to 90%, non-condensing

Power: 9 volts, 300 mA

Size: 0.9"H x 2.1"W x 3.9"D (2.3 x 5.3 x 9.9 cm)

Weight: 4.9 oz. (139 g)

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?
- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 6 p. m. and you need help, but your vendor's tech support line is closed.

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

Ordering Information

ITEM	CODE
Async Mini Fibre Optic Modem, RS-485	
ST connectors, 850-nm multimode fibre	
115 VAC	ME615A
230 VAC	ME615AE
ST connectors, 1300-nm single-mode fibre	
115 VAC	ME616A
230 VAC	ME616AE