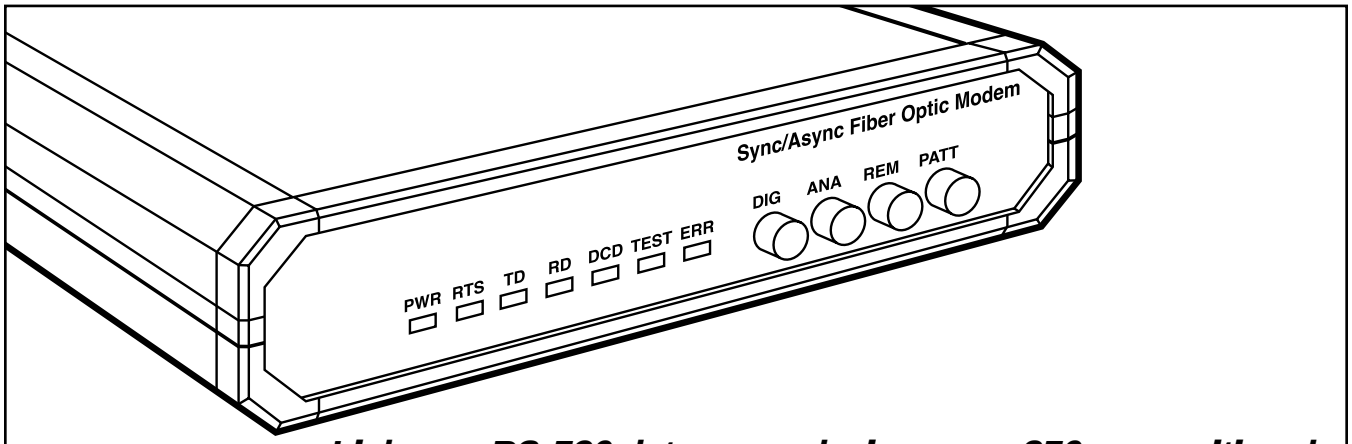
BLACK BOX®
NETWORK SERVICES

SYNC/ASYNC FIBRE OPTIC MODEM



Link your RS-530 datacomm devices over 850-nm multimode or 1300-nm single-mode fibreoptic cable.

Key Features

- ***Operates in async or sync mode at data rates from 19.2 to 256 kbps.***
- ***Supports 1300-nm single mode fibre or 850-nm multimode fiber connections.***
- ***RS-530 digital interface.***
- ***Diagnostic V.54 loops and built-in V.52 BERT.***

Keep your long-range data links secure with the Sync/Async Fibre Optic Modem from Black Box. It provides a fibre link between computers, routers, multiplexors, and other data-communications devices.

This handy modem adapts to meet your needs: it operates at 16 selectable synchronous or asynchronous data rates from 19.2 kbps to 256 kbps.

The Fibre Optic Modem converts electrical signals from DTE equipment into optical signals via an infrared light-emitting diode. At the opposite end of the fibre, the optical signals are converted back into RS-530 electrical signals.

The Fibre Optic Modem is designed to operate with the following sizes and grades of cable:

- 850 nm for use with multimode fibres, or
- 1300 nm for use with single-mode fibers.

Fibre optic cable provides immunity against electrical interference, such as electromagnetic interference (EMI) and radio-frequency interference (RFI), spikes, and differential ground loops. Even in hazardous or hostile environments, fibre optic cable maintains a secure link and protects against sparking and lightning.

The Fibre Optic Modem provides three clocking modes for maximum flexibility: internal clock, receive loopback clock, and external DTE clock.

What's more, the Fibre Optic Modem uses a Phase Locked Loop (PLL) circuit to recover jitter-free data and clock from the optical signal.

V.54 diagnostics are used for local analog and digital loopbacks, and remote digital loopback. The loopback commands are controlled either by a manual switch, or via the DTE interface signals. A front-panel switch generates an internal pseudo-random test pattern (511-bit) according to the ITU V.52 standard, for testing end-to-end connectivity. An Error LED flashes whenever the Modem detects a bit error.

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 recent 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.

Specifications

Operating Wavelength: ME555A(E): 1300 nm for single-mode fiber; ME556A(E): 850 nm for multimode fiber

Transmission Line: Dual fiber optic cable

Speed: Synchronous: Up to 256 kbps; Asynchronous: Up to 115.2 kbps

Fiber Optic Interface: ST® connectors

Protocol: Synchronous or asynchronous

Indicators: (7) LEDs: Transmit Data (TD), Receive Data (RD), Request to Send (RTS), Data Carrier Detect (DCD), BER test error (ERR), Power (PWR), Loopback mode or BER (TEST)

Interface: RS-530

Connectors: ME555A(E): (2) ST for 1300-nm single mode, (1) DB25 female for RS-530; ME556A(E): (2) ST for 850-nm multimode, (1) DB25 female for RS-530

Diagnostics: Complies with ITU V.54 standard:

Digital Loopback: Local Digital (DIG) activated by a front-panel switch; Remote (REM) activated by a front-panel switch or by DTE interface signals (RS-530);

Local Analog Loopback: Local (ANA) activated by a front-panel switch or by DTE interface signals

BERT: Generates and detects a pseudo-random BERT 511-bit data pattern; The ERROR indicator turns on for any bit error detected on the received data

Timing Elements: Receive clock: Derived from the receive signal; Transmit clock: Derived from 3 alternative sources including internal oscillator (INT), external from the DTE (EXT), or recovered from the receive signal looped back as a transmit clock (RCV)

Temperature Tolerance: 0 to 50°C

Humidity: Up to 90% noncondensing

Power Ranges: Typical output power: -18 dBm for 850 nm or 1300 nm (62.5/125 µ); Receiver sensitivity: -48 dBm for 850 nm, -50 dBm for 1300 nm; Dynamic range: 36 dB

Power Supply: ME555A, ME556A: 115 VAC, 60 Hz; ME555AE, ME556AE: 230 VAC; 47-63 Hz; 5 VA

Size: 4.3 x 24.4 x 19.3 cm

Weight: 1.4 kg

What the Package Includes

- Sync/Async Fiber Optic Modem
- 115- or 230-VAC Power Supply
- Users' Manual

Black Box offers the best warranty program in the industry—Fido Protection®. For more information, request **FaxBack 22512**.

Ordering Information

ITEM	CODE
Sync/Async Fibre Optic Modem	
ST for 1300-nm single mode, RS-530	
115-VAC	ME555A
230-VAC	ME555AE
ST for 850-nm multimode, RS-530	
115-VAC	ME556A
230-VAC	ME556AE