



# Audio Fiber Optic Link

**05E  
SERIES  
MULTIMODE  
SINGLEMODE**

### FEATURES:

- ◆ Line Level 600 Ohm Balanced or Unbalanced Audio
- ◆ Diagnostics: DC Power and Optical Presence, Audio Level (Module only)
- ◆ No user or installation adjustments
- ◆ ST Optical Connector

### SPECIFICATIONS:

#### Audio:

I/O Level @ 600 ..... 0 dBm (2.2 Vp-p)  
 I/O Level Max ..... +12 dBm (8.8 Vp-p)  
 I/O Impedance ..... 600  
 Bandwidth ..... 20 Hz to 20 kHz  
 THD ..... <1.0 %  
 Signal to Noise ..... >65 dB  
 Connector ..... Terminal Block

#### Optical:

##### Multimode

Wavelength ..... 1310 nm  
 Loss Budget (62.5/125 μm fiber) ..... 10dB  
 Connector ..... ST

##### Singlemode

Wavelength ..... 1310 nm  
 Loss Budget (9/125 μm fiber) ..... 18dB  
 Connector ..... ST

#### Environmental

Operating Temp ..... -40°C to +75°C  
 Storage Temp ..... -40°C to +85°C  
 Humidity ..... 0% to 95% (non condensing)  
 MTBF ..... >100,000 hours

#### Power Supply:

Included with modules  
 Module Transmitter ..... 12 VDC  
 Module Receiver ..... 12 VDC  
 Rack Card ..... (See AFI Part #: SR-50/5)

#### Size:

Rack Card ..... 5.0" x 6 1/2" x 1.0"  
 Module ..... 4 1/4" x 4 1/4" x 1 1/8"



The American Fibertek 05E Series transmits single direction line level audio, 600 ohms balanced or unbalanced, on one multimode or singlemode fiber. The audio is transmitted over the link using FM modulation which results in an improved signal to noise ratio and a constant audio output level over the full optical loss budget.

Diagnostic indicators provide a quick visual check of system status. Also available is a module receiver with an integrated 5 watt 70V speaker output capability. See the MR-05B-PA datasheet for more details.

Designed to be completely transparent, these links require no field adjustments at installation or additional maintenance thereafter. Equipment may be ordered as stand alone modules or rack cards that are mounted in the American Fibertek Card Cage: SR-50/5 or SR-50H/5 (redundant power supplies).

### Ordering Information

#### One-Way Audio

##### Multimode

MT-05E Module Transmitter  
 MR-05E Module Receiver  
 RT-05E Rack Card Transmitter  
 RR-05E Rack Card Receiver Module

##### Singlemode

MT-05E-S Module Transmitter  
 MR-05E-S Module Receiver  
 RT-05E-S Rack Card Transmitter  
 RR-05E-S Rack Card Receiver

#### Two-Way Audio

##### Multimode

MX-05E Module, Two Fibers Tx/Rx  
 MTX-05E Module, One Fiber Tx  
 MRX-05E Module, One Fiber Rx

##### Singlemode

MX-05E-S Module, Two Fibers Tx/Rx  
 MTX-05E-S Module, One Fiber Tx  
 MRX-05E-S Module, One Fiber Rx

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