



# Audio Systems

**05B-12VDC  
SERIES  
MULTIMODE  
SINGLEMODE**

### FEATURES:

- ◆ 600 Ohm Balanced or Unbalanced Audio
- ◆ Diagnostics: Power and Optical Presence
- ◆ No user or installation adjustments
- ◆ ST Optical Connector

### SPECIFICATIONS:

#### Audio:

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

#### Optical:

##### Multimode

Wavelength ..... 850 nm  
 Loss Budget (62.5/125 μm fiber).....20dB  
 Connector ..... ST

##### Singlemode

Wavelength ..... 1310 nm  
 Loss Budget (9/125 μm fiber).....21dB  
 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 #: SR20/2)

#### Size:

Rack Card.....5.0" x 6<sup>1</sup>/<sub>2</sub>" x 1.0"  
 Module.....2<sup>5</sup>/<sub>8</sub>" x 5<sup>3</sup>/<sub>4</sub>" x 1<sup>3</sup>/<sub>8</sub>"

#### Ordering information:

##### Multimode

MT-05B-12VDC    Module Transmitter  
 MR-05B-12VDC    Module Receiver  
 RT-05B            Rack Card Transmitter  
 RR-05B            Rack Card Receiver

##### Singlemode

MT-05B-S-12VDC    Module Transmitter  
 MR-05B-S-12VDC    Module Receiver  
 RT-05B-S            Rack Card Transmitter  
 RR-05B-S            Rack Card Receiver

3/13/14 JPK



The American Fibertek 05B 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.

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: SR20/2 or SR-20H-2 (redundant power supplies).

