



**M1485-R3  
SERIES  
MULTIMODE**

**VIDEO AND MULTI-PROTOCOL BI-DIRECTIONAL DATA  
TRANSCEIVER : RS485, RS422, & Manchester**  
(Rackcard Installable into the IFS R3 Subrack)

**FEATURES:**

- ◆ Diagnostics: Power, Video, Data and Optical Presence
- ◆ Switch Selectable  
RS485 (2 Wire or 4 Wire)  
RS422, Manchester
- ◆ Switch Selectable Termination and Fail Safe Bias
- ◆ Single or Dual Fiber Alternative

**SPECIFICATIONS:**

**Video:**

I/O Level.....1Vp-p  
I/O Impedance.....75 Ω  
Bandwidth.....6 MHz  
Differential Gain.....5%  
Differential Phase.....3°  
SNR.....55 dB  
Connector.....BNC

**Data:**

Data Rate .....  
RS485,RS422.....up to 100 Kb/s  
Manchester .....up to 50 Kb/s  
Data Connector .....5 Pin Screw Terminal

**Optical:**

Wavelength.....850/1300nm  
Loss Budget (62.5/125µm fiber).....12dB  
Connector.....ST

**Temperature (Operating)**

-40°C to +75°C, non-condensing

**Power Supply:**

Module Transmitter - 12 VDC: 10 VA  
(AFI Part #: PS-12)  
Module Receiver - 12 VDC: 10 VA  
(AFI Part#: PS-12)

**Size:**

Rack Card Requires one rack slot  
Module: 4¼" x 4¼" x 1⅞"

**Ordering information:**

MTM=Module Transmitter – Field Unit  
RRM=Rack Card Receiver –Control Site

**EXAMPLE:**

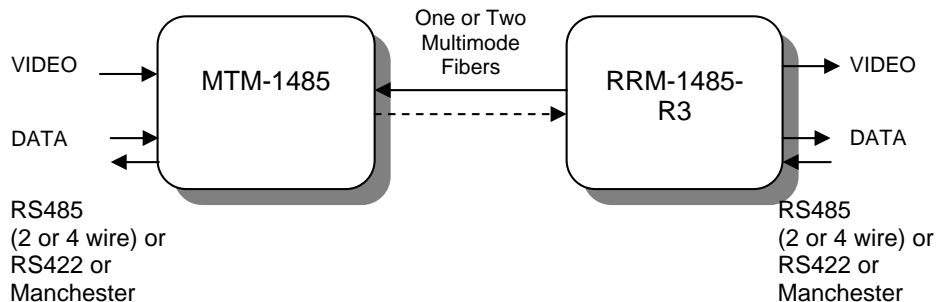
Single fiber module video Tx to rack Rx:  
**MTM-1485 to RRM-1485-R3**



The American Fibertek M1485-(R3) Series is a low cost, low profile video and bi-directional data transceiver system. The M1485 supports RS485 (2 or 4 wire), RS422, and Manchester data requirements

The rackcard receiver is mechanically and power supply compatible with the IFS R3 subrack and power supply. This provides one an option to add an AFI product to an existing IFS-R3 subrack. However, an AFI module transmitter must be used with the AFI RRM-1485-R3 receiver.

The system utilizes one or two multimode optical fibers. Designed to be completely transparent, this system requires no field adjustments at installation or additional maintenance thereafter. Diagnostic indicators provide a quick visual indication of system status.



12/6/11 JPK