



**946C  
SERIES  
MULTIMODE**

**FOUR-CHANNEL DIGITAL VIDEO & MULTI-PROTOCOL  
RS485/RS422/RS232/MANCHESTER & CONTACT  
CLOSURE SYSTEM**

**Features:**

- ◆ Compatible with NTSC, (RS – 170A & RS –343A), PAL and SECAM
- ◆ Diagnostics: Video, Data, OLI, DC Power and Digital Frame Sync
- ◆ Automatic Resettable Fuses on Power Lines
- ◆ RS485/422/232 Two Way Data
- ◆ Real Time Video Transmission
- ◆ Serial Digital Transmission

**Specifications:**

**Video:**

I/O Level .....1 Vp-p (±3 dB)  
 I/O Impedance ..... 75 Ohms  
 Bandwidth .....7 MHz  
 Differential Gain .....2 %  
 Differential Phase.....0.7 °  
 SNR (Unified Weighted).....55 dB  
 Connector ..... BNC

**Data:**

Interface....485(2 or 4 Wire)/RS422/RS232  
 Data Format .....Asynchronous, Serial  
 Data Rate ..... DC to 115 Kbs  
 Connector .....5 Pin Screw Terminals

**Contact Closure:**

Input ..... Switch Closure to Ground  
 Output .....Dry Contact  
 Response Time ..... 2 mS  
 Max Voltage ..... 100 VDC or Peak AC  
 Max Current ..... 0.5 A  
 Connector.....Terminal Block

**Optical**

Wavelength ..... 1310/1550 nm  
 Loss Budget (62/125µ).....12 dB  
 Maximum Distance .....2 Km  
 (Limited by Fiber Dispersion)  
 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:**

Module : 12 VDC (AFI Part#: PS-12D)  
 Rackcard: SR20/2

**Size:**

Module-.....81/8" x 41/8" x 11/2 "  
 Rack Card-2 rack slots..... 6½" x 5" x 2"  
 Maximum Loading:.....7 Cards per SR-20/2

**Ordering information:**

**Example: MT-946C to RR-946C**



The American Fibertek 946C Series transmits four channels of high-quality 10 bit digitized video and one channel of multi-protocol data (RS485 (2 wire or 4 wire) or RS422 or RS232 or Manchester) and a bi-directional contact closure on one multimode optical fiber at 1310 and 1550nm.

Designed to be completely transparent to all camera and monitor manufacturers, this system requires no field adjustments at installation or additional maintenance thereafter. Diagnostic indicators provide a quick visual indication of system status. **The “Afinety” intelligent remote monitoring system is available on this product, please consult factory.**

Equipment may be ordered as stand alone modules or rack cards that are mounted in the American Fibertek Card Cages: SR-20/2 or SR-20H/2 (with redundant power supplies).

