Overview
The IFS Fiberpak™ FP1910WDM fiber optic transmission kit includes everything you need to transmit a CCTV signal and bi-directional data simultaneously over one multimode optical fiber. The kit includes a transmitter and receiver that are designed to be universally compatible with major CCTV camera manufacturers and support RS-232, RS-422, and 2-wire or 4-wire RS-485 data interfaces and all major data protocols. In addition, the kit includes wall mounted AC transformers for both transmitter and receiver as well as a complete installation and operations manual. FiberPak™ Videolinks' Plug-and-play design and included accessories make selecting the right fiber optic modules for your installation easy.

Application Examples
Compatible With:
• Javelin® Video and Bi-Directional RS-232 Data
• Panasonic® Video and Bi-Directional RS-422 Data
• Sensormatic® AD Video and Bi-Directional RS-422 Data
• Vicon® Video and Bi-Directional RS-422 Data

Video with Bi-Directional Data Transmission
Transmits a CCTV signal and bi-directional data simultaneously over one multimode optical fiber.

Standard Features
• FM Video Transmission
• Power Supplies and Installation Manuals Included
• Supports RS-232, RS-422, RS-485 (2-wire or 4-wire) Data Interfaces
• Transparent to Data Encoding/Compatible with Major CCTV Camera Manufacturers
• Power and Carrier Detect Status Indicating LED's to Monitor System Performance
• Integrated WDM for greater Product Reliability
• No In-field Electrical or Optical Adjustments Required
• Distances up to 2.5 Miles (4 km) Without Repeaters
• NTCIP Compatible
• Tested and Certified by an Independent Testing Laboratory for Full Compliance with the Environmental Requirements (Ambient Operating Temperature, Mechanical Shock, Vibration, Humidity with Condensation, High-Line/Low-Line Voltage Conditions and Transient Voltage Protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
• Hot-Swappable Rack Modules
• Full Color Compatibility
• NTSC, PAL, SECAM Compatible
• Automatic Resettable Fuses
• Comprehensive Lifetime Warranty
### Specifications

#### Video
- **Video Input:** 1 volt pk-pk (75 ohms)
- **Bandwidth:** 5 Hz - 8 MHz
- **Differential Gain:** <5%
- **Differential Phase:** <5°
- **Tilt:** <1%
- **Signal-to-Noise Ratio (SNR):** >55 dB @ 10 dB Attn.

#### Data
- **Data Interface:** RS232, RS-422, Transformer, RS-485 (2 and 4 wire)
- **Data Format:** NRZ, NRZI, Manchester, Bi-phase
- **Wavelength:** 850/1310 nm, Multimode
- **Number of fibers:** 1

#### Connectors
- **Optical:** ST
- **Power and Data:** Terminal Block with Screw Clamps
- **Video:** BNC (Gold Plated Center-Pin)

#### Electrical & Mechanical
- **Power:** 12 VDC @ 200 mA
- **Current Protection:** Automatic Resettable Solid-State Current Limiters
- **Circuit Board:** Meets IPC Standard
- **Size (in./cm.) (L x W x H):**
  - Surface Mount: 7.0 x 4.9 x 1.0 in., 17.8 x 12.5 x 2.5 cm
  - Shipping Weight: < 2 lbs./0.9 kg

#### Environmental
- **MTBF:** > 100,000 hours
- **Operating Temp:** -40° C to +74° C
- **Storage Temp:** -40° C to +85° C
- **Relative Humidity:** 0% to 95% (non-condensing)†

†May be extended to condensation conditions by adding suffix ‘-C’ to model number for conformal coating.

### System Design

![Diagram of system design](image)

### Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Fibers Required</th>
<th>Optical Pwr. Budget</th>
<th>Max. Distance*</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP1910WDM</td>
<td>FiberPak™ Video Transmitter (850/1310 nm)</td>
<td>1</td>
<td>14 dB</td>
<td>2.5 miles (4 km)</td>
</tr>
<tr>
<td>FP1910WDM</td>
<td>FiberPak™ Video Receiver (1310/850 nm)</td>
<td>1</td>
<td>14 dB</td>
<td>2.5 miles (4 km)</td>
</tr>
<tr>
<td>PS-12VDC</td>
<td>12 Volt DC Plug-in Power Supply (Included)</td>
<td>1</td>
<td>14 dB</td>
<td>2.5 miles (4 km)</td>
</tr>
<tr>
<td>PS-12VDC-230</td>
<td>12 Volt DC Plug-in Power Supply, 230 VAC Input (Included if specified at time of order)</td>
<td>1</td>
<td>14 dB</td>
<td>2.5 miles (4 km)</td>
</tr>
</tbody>
</table>

*Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels. Distance can also be limited by fiber bandwidth. **For 50/125 fiber, subtract 4 dB from Optical Power Budget. All accessories are third party manufactured.