PRODUCT SPECIFICATION

AM VIDEO MINI TRANSMITTER

VT1000AC SERIES

DESCRIPTION

The IFS VT1000AC series video transmitter provides transmission of a fixed video signal using AM modulation on one multimode fiber optic cable. The transmitter includes a built-in isolation transformer allowing both the camera and fiber optic transmitter to be powered by the same 24VAC power supply. The VT1000AC video transmitter is compatible with the IFS VR1000, VR1001, VR1100, and VR2100 series receivers. Plug and Play design ensures ease of installation requiring no electrical or optical adjustments. The transmitter incorporates a power status indicating LED for monitoring proper system operation. The transmitter is available in a stand-alone version only.

APPLICATION EXAMPLES

• CCTV (Fixed Video)

FEATURES

• AM Video Transmission
• NTSC, PAL, SECAM Compatible
• Full Color Compatibility
• No In-field Electrical or Optical Adjustments Required
• Built-in Isolation Transformer for Direct 24VAC Connection
• Power Status Indicating LED to Monitor System Performance
• Distances up to 3.5 miles (5.5 km) Without Repeaters
• Lifetime Warranty

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>VT1000AC</td>
<td>Video Transmitter (850 nm)</td>
<td>1</td>
<td>14 dB</td>
<td>2.5 miles (4 km)</td>
</tr>
<tr>
<td>VT1002AC</td>
<td>Video Transmitter, high power (850 nm)</td>
<td>1</td>
<td>20 dB</td>
<td>3.5 miles (5.5 km)</td>
</tr>
</tbody>
</table>

OPTIONS

Add ‘-C’ for Conformally Coated Printed Circuit Boards (Extra charge, consult factory)

* 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
**SPECIFICATIONS**

### VIDEO

- **Video Input:** 1 volt pk-pk (75 ohms)
- **Bandwidth:** 5 Hz - 10 MHz
- **Differential Gain:** <5%
- **Differential Phase:** <5°
- **Tilt:** <1%
- **Signal-to-Noise Ratio (SNR):** 60 dB

### WAVELENGTH

- **850 nm**

### NUMBER OF FIBERS

- **1**

### CONNECTORS

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

### ELECTRICAL & MECHANICAL

- **Power:** 24 VAC @ 150 mA
- **Circuit Board:** Meets IPC Standard
- **Size (in./cm.):** (LxWxH) 4.2 x 3.5 x 2.0 in., 10.7 x 8.9 x 5.1 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.

### AGENCY COMPLIANCE

- **MADE IN THE USA**

### OPTICAL POWER BUDGET

<table>
<thead>
<tr>
<th>FIBER</th>
<th>WAVELENGTH</th>
<th>TRANSMITTER MODEL</th>
<th>RECEIVER MODEL</th>
<th>OPTICAL POWER BUDGET</th>
<th>MAX. DISTANCE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimode</td>
<td>850 nm</td>
<td>VT1000AC 25µw (-16 dBm)</td>
<td>VR1000 1 µw (-30 dBm)</td>
<td>14 dB 2.5 miles (4 km)</td>
<td></td>
</tr>
<tr>
<td>62.5/125µm**</td>
<td></td>
<td>VT1002AC 100 µw (-10 dBm)</td>
<td>VR1001 VR1100 VR2100</td>
<td>20 dB 3.5 miles (5.5 km)</td>
<td></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

### SYSTEM DESIGN

![System Diagram]

Due to our continued effort to advance technology, product specifications are subject to change without notice.

TEL (203)426-1180  ■  FAX (203)426-3326  ■  www.ifs.com  ■  sales@ifs.com

16 Commerce Road  ■  Newtown, CT 06470

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