

### video with return data







# Description

The ComNet FVTDR10-B for the Bosch dome camera system supports the simultaneous transmission of video in one direction and pan tilt and zoom control signals in the reverse direction. The module is compatible with the ComNet FVRDT10M1, which is both a stand alone and rack mount device. The FVTDR10-B supports RS-232 and RS-422 data signals from the receiver to the transmitter and outputs RS-422 data into the Bosch dome. Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required. The FVTDR10-B is camera mounted and powered by the camera's internal power supply. Bi-color (Red/Green) LED indicators on the receiver are provided for rapidly ascertaining equipment operating status. The receiver module is interchangeable between stand-alone or card mount configurations.

### **Features**

- AM video transmission
- Full color compatibility
- Supports RS-232 or RS-422 data interfaces
- Transparent to data encoding
- Compatible with all NTSC, PAL, or SECAM CCTV camera
- Full range Automatic Gain Control (AGC)
- Designed to meet the full 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.
- Voltage transient protection on all power and signal input/output lines provides protection from power surges and other voltage transient events.
- Bi-color (Red/Green) LED status indicators provide indication of critical operating parameters
- Integrated WDM for greater product reliability
- Hot-swappable receiver module
- Lifetime Warranty

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## specifications

#### **VIDEO**

Video Input (FVT):1 volt pk-pk (75 ohms)Video Output (FVR):1 volt pk-pk (75 ohms)Bandwidth:5 Hz - 10 MHzDifferential Gain:<5%</td>

Differential Phase: <5°
Tilt: <1%

Signal-to-Noise Ratio (SNR): >55 dB @ 10 dB ATTN.

Max. RG-59 COAX Distance: 100m (300ft) Camera to Fiber Optic

Module to maintain 6Mhz Bandwidth

**DATA** 

Data Interface: RS-232, RS-422

Data Format: NRZ, NRZI, Manchester, Bi-phase

Data Rate: DC-100 Kbps (NRZ)

WAVELENGTH

FVT: 850/1310 nm, Multimode FVR: 1310/850 nm, Multimode

NUMBER OF FIBERS

LED INDICATORS - Video Present -Data Present

1

**CONNECTORS** 

Optical: ST

Power and Data (FVR): Terminal Block

Video and Sync: BNC (Gold Plated Center-Pin)

#### **ELECTRICAL & MECHANICAL**

Power:
FVT: 24 VAC from camera @35 mA

FVR: 8-15 VDC @ 100 mA

Rack (FVR): From Rack

Number of Rack Slots (FVR): 1
Current Protection (FVR): Automatic Resettable

Solid-State Current Limiters

Max. RG59 Cable Length (FVR): 750 ft.

Circuit Board: Meets IPC Standard

Size (in./cm) (LxWxH)

FVR:  $6.1 \times 5.3 \times 1.1$  in.,

(15.5 × 13.5 × 2.8 cm)

FVT: 2.8 × 1.9 × .875 (7.5 × 5.0 × 2.5 cm)

Shipping Weight (FVT/FVR): <2 lb./0.9 kg

#### **ENVIRONMENTAL**

 MTBF:
 >100,000 hours

 Operating Temp:
 -40° C to +75° C

 Storage Temp:
 -40° C to +85° C

Relative Humidity: 0% to 95% (non-condensing)†

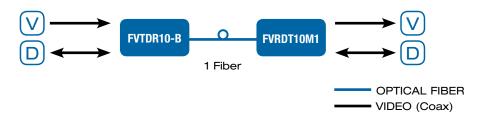
<sup>\*</sup> May be extended to condensation conditions by adding suffix '/C'





PART NUMBER	DESCRIPTION	FIBERS REQUIRED	FIBER	OPTICAL PWR BUDGET	MAX. Distance <sup>†</sup>	# RACK SLOTS
FVTDR10-B FVRDT10M1	Video Transmitter/Data Receiver (850/1310 nm) Video Receiver/Data Transmitter (1310/850 nm)	1	Multimode <sup>‡</sup> 62.5/125µm	14 dB	4 km (2.5 miles)	1 (FVR)
Accessories Options	9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included for FVR)  Add '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)  Add '/CN' for required cables, mounting brackets, and mounting hardware (FVTDR10-B only, extra charge, consult factory)					

<sup>†</sup> Distance may be limited by optical dispersion. ‡ For 50/125µm fiber, subtract 4 dB from the optical power budget.





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