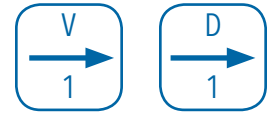


### APPEARANCE



### DESCRIPTION

The ComNet™ FVT110(M,S)1/BO is a video and data transmitter that, when paired with the FVR110(M,S)1, supports the simultaneous transmission of short haul quality 10-bit EIA RS-250C digitally encoded video and bi-directional data over one multimode or single mode optical fiber. It is for use in Bosch Bilinx™ dome cameras, utilizing time-based correction these units can achieve distances of 48km. The module also supports Bosch Bi-Phase operation, which transmits camera control information over a simplex RS-422 connection. The FVT110(M,S)1/BO is designed to plug directly into the Bosch dome, and connects with power, video input and two way data via the Bosch electrical connector.

### APPLICATIONS

- › High-Performance CCTV with PTZ Control for Bosch In Dome Cameras

### FEATURES

- › Supports Bosch Bilinx™ and Bosch Bi-phase telemetry systems
- › One Data channel
- › Distances up to 30 miles (48 km)
- › Exceeds all requirements for RS-250C short-haul transmission: True broadcast video performance
- › Time-Base Corrected Up-the-Coax Data
- › Compatible with all NTSC or PAL camera systems
- › Tested and certified by an independent 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.
- › Voltage transient protection on all power and signal input/output lines provides unconditional protection from power surges and other voltage transient events.
- › Automatic resettable fuses on all power lines
- › Bi-color (Red/Green) LED status indicators provide rapid indication of critical operating parameters
- › Lifetime Warranty

**SPECIFICATIONS**

**Video**

Video Input:	1 volt pk-pk (75 ohms)
Overload:	>1.5V pk-pk
Bandwidth:	5 Hz - 10 MHz
Differential Gain:	<2%
Differential Phase:	<0.7°
Tilt:	<1%
Signal-to-Noise Ratio (SNR):	67 dB @ Maximum Optical Loss Budget
Max. RG-59 COAX Distance:	100m (300ft) Camera to Fiber Optic Module to maintain 6Mhz Bandwidth

**Data**

Data Interface:	Bosch BiLinx™ and Bi-phase
Data Format:	NRZ, NRZI Manchester and Bi-phase
Data Rate:	DC-250 Kbps (NRZ)

**Wavelength**

1310/1550 nm, MM and SM

**Optical Emitter**

Laser Diode

**LED Indicators**

- Link - Video - Data - Power

**Connectors**

Optical:	1 ST connector
Power:	Terminal Block
Video:	BNC (Gold Plated Center-Pin)
Data:	Terminal Block

**Electrical & Mechanical**

Power:	From Dome
Current Protection:	Automatic Resettable Solid-State Current Limiters
Circuit Board:	Meets IPC Standard
Shipping Weight:	<1 lb./0.45 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)*

\* May be extended to condensation conditions by adding suffix '/C' to model number for conformal coating.



**ORDERING INFORMATION**

Part Number	Description	Fibers Required	Fiber	Optical Power Budget	Maximum Distance <sup>‡</sup>	# Rack Slots
FVT110M1/BO	Bosch In Dome Video/Data Transmitter	1	Multimode <sup>‡</sup> - 62.5/125µm	16 dB	3 km (2 mi)	N/A
FVR110M1*	Video Receiver/Data Transceiver	1	Multimode <sup>‡</sup> - 62.5/125µm	16 dB	3 km (2 mi)	1
FVT110S1/BO	Bosch In Dome Video/Data Transmitter	1	Single Mode <sup>‡</sup> - 9/125µm	16 dB	48 km (30 mi)	N/A
FVR110S1*	Video Receiver/Data Transceiver	1	Single Mode <sup>‡</sup> - 9/125µm	16 dB	48 km (30 mi)	1
Options	Add '/C' for Conformally Coated 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.

\* See FVT/FVR110(M,S)1/[M] Data Sheet for receiver specifications.

**TYPICAL APPLICATION**



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