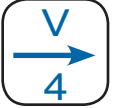


4-channel digital video multiplexer 10-bit digital/short-haul



Description

The ComNet™ FVT/FVR401 multiplexer simultaneously transmits four channels of video over one optical fiber utilizing state-of-the-art 10-bit digital encoding and decoding for high-quality video transmission that meets the requirements of EIA RS-250C for short-haul video transmission. These environmentally hardened units are ideal for use in unconditioned roadside or out-of-plant installations. These units are completely transparent to and universally compatible with any NTSC, PAL, or SECAM CCTV camera systems. Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required. Bi-color (Red/Green) LED indicators are provided for rapidly ascertaining equipment operating status. These units are interchangeable between stand-alone or card mount configurations.

Features

- 10-bit digital video transmission: transmits 4 real-time color video signals on one optical fiber
- Exceeds all requirements for EIA RS-250C short-haul transmission: Extremely high video performance
- Exceptionally low video distortion with zero Performance Variation vs. Optical Path Loss
- Ideally suited to networks requiring multiple physical layers where video degradation may be a problem
- Compatible with all NTSC, PAL, or SECAM CCTV camera systems
- Wide optical dynamic range: optical attenuators are never required
- NTCIP compatible
- 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.
- Robust design ensures extremely high reliability in unconditioned out-of-plant environments
- Bi-color (Red/Green) LED status indicators provide rapid indication of critical operating parameters
- Automatic resettable solid-state current limiters
- Lifetime Warranty

Applications

- High-Performance CCTV (Fixed Video)



specifications

VIDEO

Video Input:	1V pk-pk (75 ohms)
Overload:	>1.5V pk-pk
# Input/Output Channels:	4
Bandwidth (minimum):	10 Hz - 6.5 MHz
Differential Gain:	<2%
Differential Phase:	<0.7°
Tilt:	<1%
Signal-to-Noise Ratio (SNR):	67 dB Typical
Max. RG-59 COAX Distance:	100m (300ft) Camera to Fiber Optic Module to maintain 6Mhz Bandwidth

WAVELENGTH

1310 nm, Multimode and Single Mode

NUMBER OF FIBERS

1

LED INDICATORS

- Video Sync Presence for Each Video Channel
- Power

CONNECTORS

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

ELECTRICAL & MECHANICAL

Power:	8-15 VDC @ 3W
Surface Mount:	From Rack
Rack Mount:	1
Number of Rack Slots:	Automatic Resettable Solid-State Current Limiters
Current Protection:	Meets IPC Standard
Circuit Board:	6.1 x 5.3 x 1.1 in., (15.5 x 13.5 x 2.8 cm)
Size (in./cm) (L×W×H):	<2 lb./0.9 kg
Shipping Weight:	

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.

AGENCY COMPLIANCE



MADE IN THE
USA

PART NUMBER	DESCRIPTION	FIBERS REQUIRED	FIBER	OPTICAL PWR BUDGET	MAX. DISTANCE†	# RACK SLOTS
FVT401M1	4-Channel Video Transmitter (1310 nm)	1	Multimode 62.5/125µm	16 dB	2 km (1.2 miles)	1
FVR401M1	4-Channel Video Receiver (1310 nm)					
FVT401S1	4-Channel Video Transmitter (1310 nm)	1	Single Mode 9/125µm	23 dB	69 km (43 miles)	1
FVR401S1	4-Channel Video Receiver (1310 nm)					
Accessories	9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)					
Options	Add 'C' for Conformally Coated Circuit Boards (Extra charge, consult factory)					

NOTE: This product requires a fiber installation with a minimum 30 dB connector return loss. The use of Super Polish Connectors is recommended.

Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J

In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

† Distance may be limited by optical dispersion.

