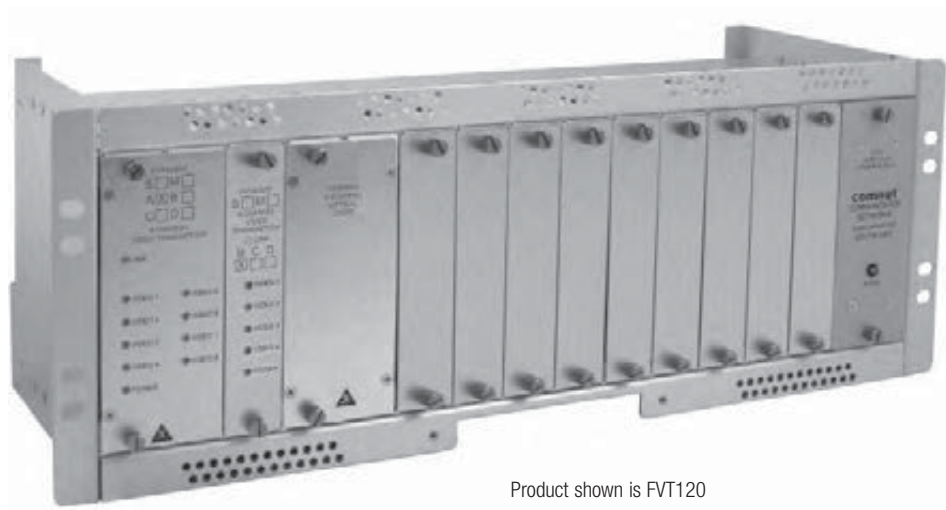


## 28-channel digital video 10-bit digital/short-haul video



Product shown is FVT120



### Description

The ComNet™ FVT/FVR280S1 video transmitter and video receiver utilize 10-bit digital encoding and decoding for high-quality video transmission that exceeds the requirements of EIA RS-250C for short-haul video transmission. These environmentally hardened units provide transmission of 28 independent video channels over one optical fiber and 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.

### Applications

- High-Performance CCTV Systems

### Features

- 10-Bit digitally encoded video transmission, transmits 28 real-time/full frame color video signals
- 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
- Compatible with all NTSC, PAL, or SECAM CCTV 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.
- 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
- Lifetime Warranty



## specifications

## VIDEO

|                              |  |
|------------------------------|--|
| Video Input:                 | 1 volt pk-pk (75 ohms)   |
| Overload:                    | >1.5V pk-pk  |
| # Input/Output Channels:     | 28   |
| Bandwidth (minimum):         | 10 Hz - 6.5 MHz per channel  |
| 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

Single Mode 9/125µm

## NUMBER OF FIBERS

1

## LED INDICATORS

- Video Sync Presence for Each Video Channel
- Optical Carrier Detect - Power

## OPTICAL EMITTER

Laser Diode

## CONNECTORS

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

## ELECTRICAL &amp; MECHANICAL

|                 |                                |
|-----------------|--------------------------------|
| Power:          |                                |
| Input Voltage:  | 90-264 VAC @ 70 W Maximum      |
| Output Voltage: | 9 VDC +/- 5% @ 6.5 Amps @ 75°C |

## FUSING

|                       |  |
|-----------------------|--|
|                       | 1.25 A slow blow (rack power supply)<br>(plug-in modules individually<br>electronically fused) |
| Current Protection:   | Automatic Resettable Solid-State<br>Current Limiters   |
| Circuit Board:        | Meets IPC Standard   |
| Size (in./cm) (L×W×H) | 19 × 7.5 × 6 in.,<br>(48 × 19 × 15 cm)   |
| Shipping Weight:      | <8 lbs./3.6 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.



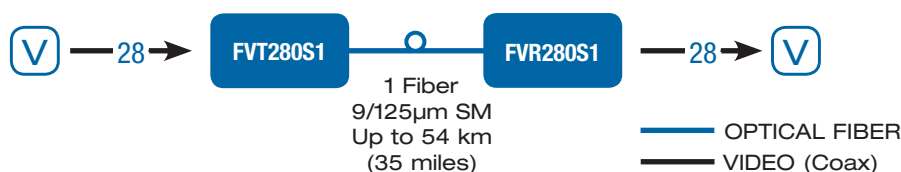
MADE IN THE  
**USA**

| PART NUMBER | DESCRIPTION       | FIBERS REQUIRED | FIBER                  | OPTICAL PWR BUDGET | MAX. DISTANCE†   |
|-------------|-------------------|-----------------|------------------------|--------------------|------------------|
| FVT280S1    | Video Transmitter | 1               | Single Mode<br>9/125µm | 18 dB              | 54 km (35 miles) |
| FVR280S1    | Video Receiver    |                 |                        |                    |                  |

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.



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