comnet

INSTALLATION AND OPERATION MANUAL

FVT/FVR1D1(M,S)1[/M] FVR2D2(M,S)2

DIGITALLY ENCODED VIDEO WITH BI-DIRECTIONAL DATA AND SIMPLEX CONTACT CLOSURE

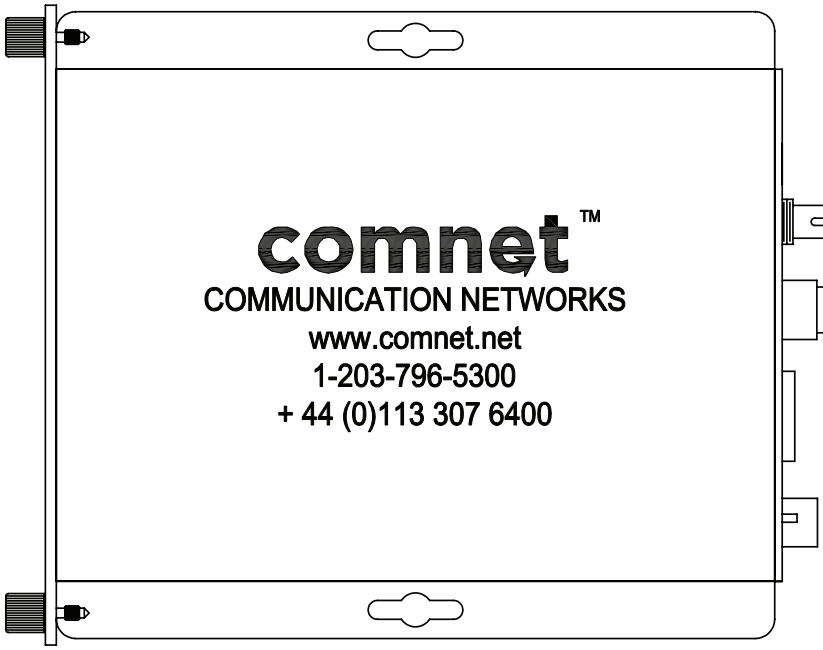
The ComNet™ FVT1D1[/M] video transmitter, along with the FVR1D1 and FVR2D2, supports the transmission of digital video transmission and bi-directional RS422 or 2- or 4-wire RS485 data channel over multimode or single mode optical fiber(s). When the unit is operated in the RS422 2-wire data mode, a simplex contact closure channel is available. This module is universally compatible with major CCTV camera manufacturers. Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required.

Each unit incorporates a bi-color (Red/Green) indicating LED for monitoring proper system operation. See **Figure 9** on **Page 6** for LED Indicator explanations.

The ComFit units in this series may be directly plugged into the ComNet Rack (Part C1) or may be either wall-mounted, rack-mounted, or DIN-rail mounted by the addition of ComNet model DINBKT1 adaptor plate. The small-size FVT1D1/M transmitters are ideal for locations where space is at a premium and are surface mount only. See **Figure A** on **Page 8** for mounting instructions.

See **Figures 1 – 12** for complete installation details.

FIGURE 1 – FVT1D1 TRANSMITTER



MULTIMODE OR
SINGLE MODE
OPTICAL FIBER

BLACK
BLACK WITH WHITE STRIPE/RED

Power Supply:
Surface Mount: 9 to 15 VDC @ 3W
Rack Mount: From Rack

NOTE: Remove Electrical
Connector for Rack Mount Units

FIGURE 2 – FVT1D1 TRANSMITTER

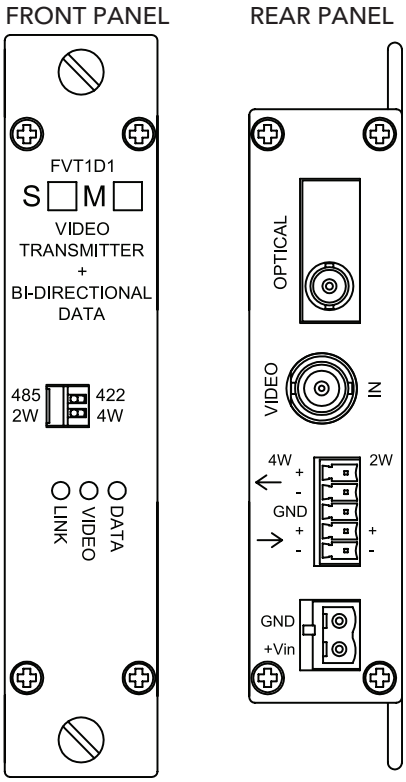
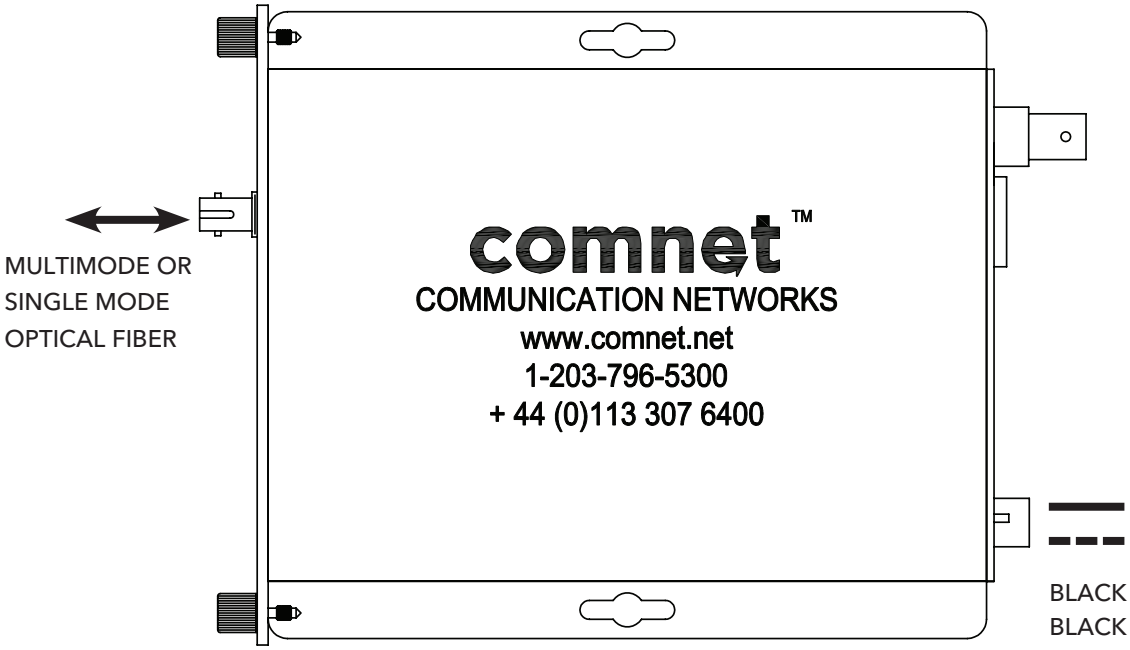


FIGURE 3 – FVR1D1 RECEIVER



Power Supply:
Surface Mount: 9 to 15 VDC @ 3W
Rack Mount: From Rack

NOTE: Remove Electrical Connector for Rack Mount Units

FIGURE 4 – FVR1D1 RECEIVER

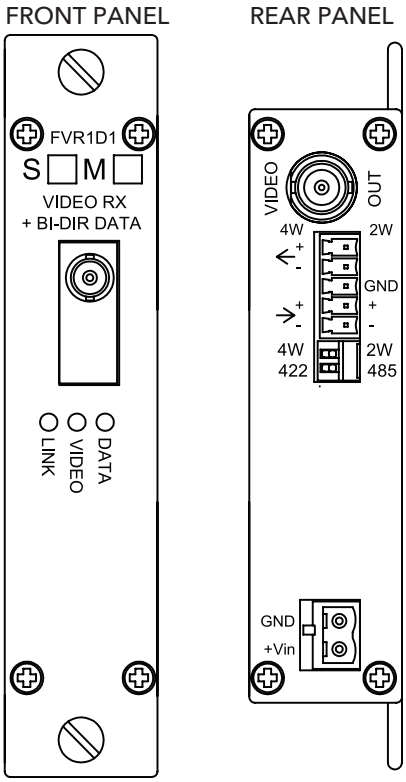
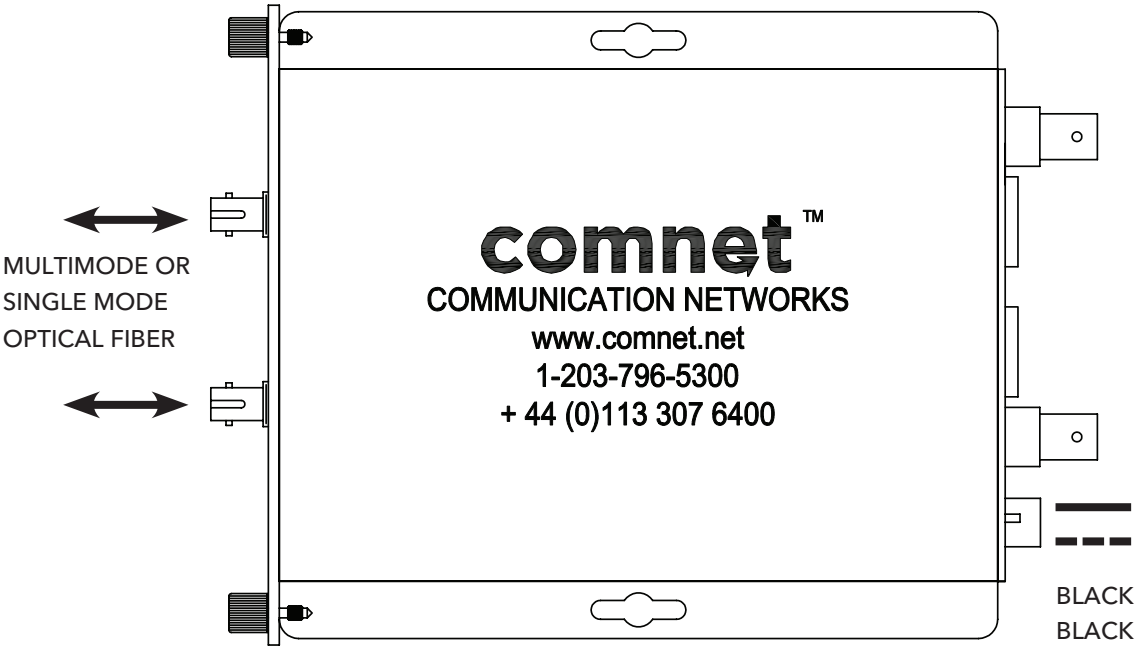


FIGURE 5 – FVR2D2 RECEIVER



Power Supply:
Surface Mount: 9 to 15 VDC @ 6W
Rack Mount: From Rack

NOTE: Remove Electrical Connector for Rack Mount Units

FIGURE 6 – FVR2D2 RECEIVER

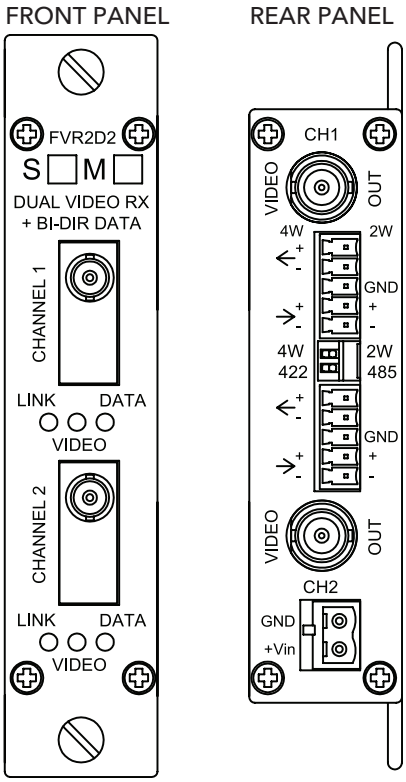
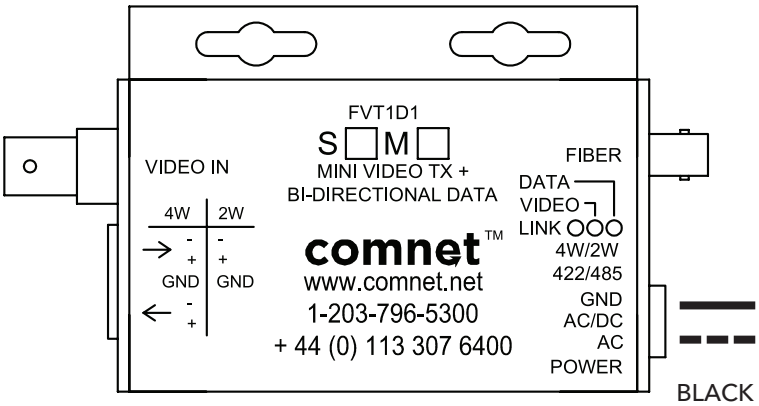


FIGURE 7 – FVT1D1/M TRANSMITTER



BLACK
BLACK WITH WHITE STRIPE/RED

Power Supply: 9-36 VDC @ 3W, 24VAC
AC: pins 1 and 2
DC: pins 2 and 3

FIGURE 8 – FVT1D1/M TRANSMITTER

FRONT PANEL REAR PANEL

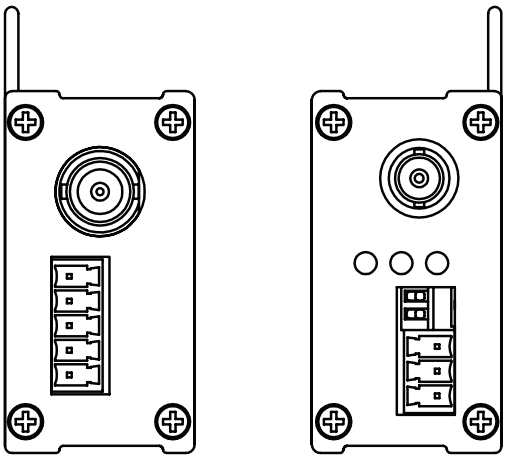
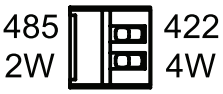


FIGURE 9 – LED INDICATORS

	LINK	VIDEO	DATA
GREEN	Communication link has been established over optical fiber	An active video signal is present on the BNC connector	An active data signal is present on the input pins of the data connector
RED	Communication link has not been established	–	–
OFF	Unit Powered Down		

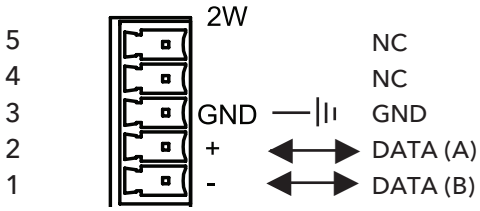
FIGURE 10 – DIP SWITCH SETTINGS



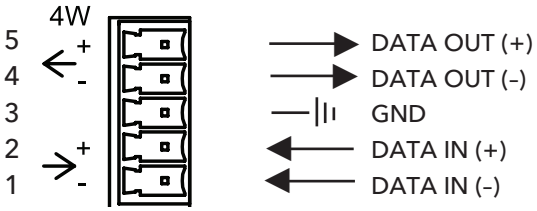
Mode	Data Switch Position	Wire Switch Position
2 Wire RS485	485	2W
RS422 Simplex + Contact Closure	422	2W
4 Wire RS485	485	4W
4 Wire RS422 Duplex	422	4W

FIGURE 11 – TRANSMITTER DATA CONNECTIONS

RS485/2W



RS485/4W OR RS422/4W



RS422/2W + CONTACT CLOSURE

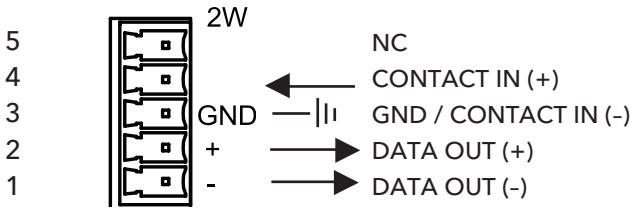
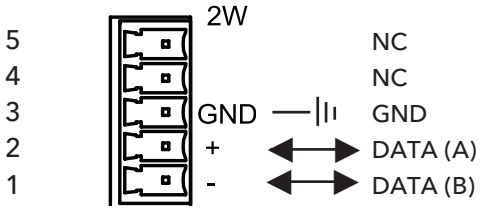
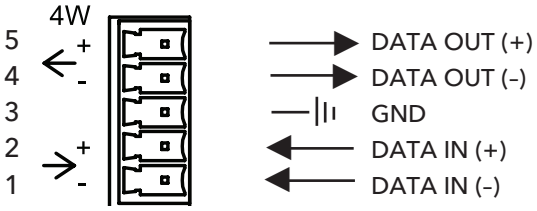


FIGURE 12 – RECEIVER DATA CONNECTIONS

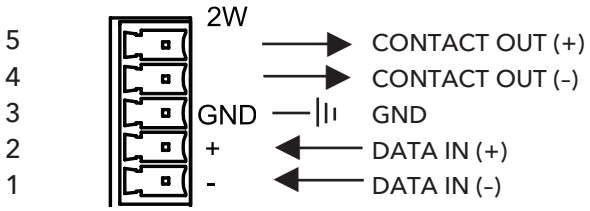
RS485/2W



RS485/4W OR RS422/4W



RS422/2W + CONTACT CLOSURE



MECHANICAL INSTALLATION INSTRUCTIONS

INSTALLATION CONSIDERATIONS

The ComFit fiber optic links in this series are supplied as a Standalone/Rack module. The FVT1D1/M is supplies as a Standalone/Surface-mount module. Units should be installed in dry locations protected from extremes of temperature and humidity.

C1-US, C1-EU, C1-AU OR C1-CH CARD CAGE RACKS

CAUTION: Although the units are hot-swappable and may be installed without turning power off to the rack, ComNet recommends that the power supply be turned off and that the rack power supply is disconnected from any power source. **Note:** Remove electrical connector before installing in card cage rack.

1. Make sure that the card is oriented right side up, and slide it into the card guides in the rack until the edge connector at the back of the card seats in the corresponding slot in the rack's connector panel. Seating may require thumb pressure on the top and bottom of the card's front panel.

CAUTION: Take care not to press on any of the LEDs.

2. Tighten the two thumb screws on the card until the front panel of the card is seated against the front of the rack.

WARNING: Unit is to be used with a listed Class 2 power supply.

IMPORTANT SAFEGUARDS:

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

MADE IN THE USA

FIGURE A

Dimensions are for a standard ComNet one slot module

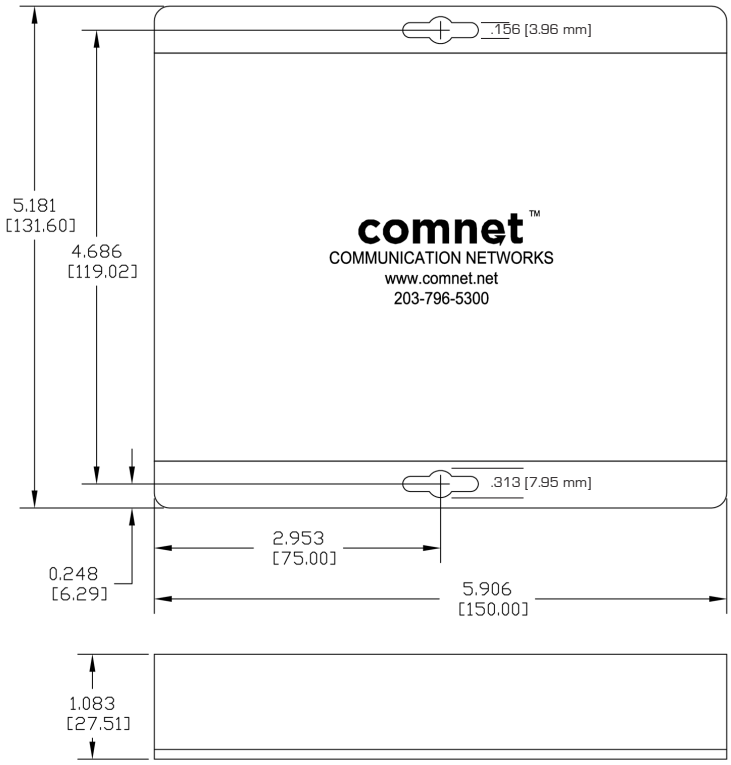
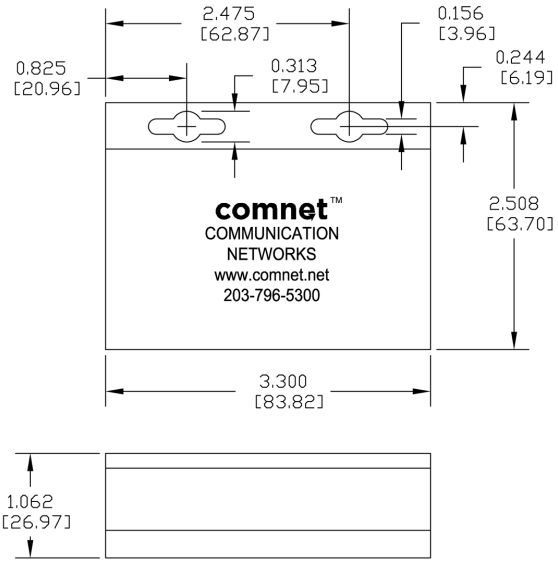


FIGURE B

Dimensions are for a ComNet™ small size module



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