

## Specifications

### Video Performance\*

Video Input Impedance	75 ohm (balanced)
Video Input Voltage	1V p NTSC, 1.3Vp PAL
Video Connector	BNC
Frequency Response	10 Hz to 7 MHz (3 dB)
Signal to Noise Ratio	62 dB as per RS250C
Differential Gain (-20°C to +70°C)	<4%
Differential Gain (-30°C to +85°C)	<7%
Differential Phase (-20°C to +70°C)	<4°
Differential Phase (-30°C to +85°C)	<7°
Field Tilt	<2%
Luminance	
Non-Linearity (-20°C to +70°C)	<4%
Luminance	
Non-Linearity (-30°C to +85°C)	<7%

### Optical Performance

Single mode - Core Diameter	8 - 10u
Optical Connector	ST, FC or SC
Transmitting Light Source	Laser 1310 nm
Optical Power Output	-8 dBm (+/- 2 dBm @ -30 °C to +85 °C)
Receiving Wavelength	1550 nm
Data Receiver Sensitivity*	- 35 dBm

### Data Interface

Data Interface	RS-485 Bi-directional – 2 or 4 wire
Data Rate*	Up to 200Kb/s

\* measured with 155S video receiver unit as per RS-250C @ 1km single mode fiber cable

Operating Temperature	-30 °C to +85 °C
Dimensions	170mm(L) x 126mm(W) x 34mm(D)
Power Requirements	12V AC or DC @ 300mA; 24VAC @ 200mA

## **155S-VT/DX-M1**

### **Fiber Optic Video Transmitter & 1Ch. RS-485 Data Transceiver**

### **Singlemode**

### **Single Fiber Operation**

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## Introduction :

The Elcommtech 155S-VT/DX-M1 forms part of a singlemode, single fiber video and data fiber optic transmission system. Using frequency modulation and operating as a dual window 1310/1550nm single fiber unit, the 155S-VT/DX-M1 provides the following facilities in a 170mm x 126mm x 34mm free standing module.

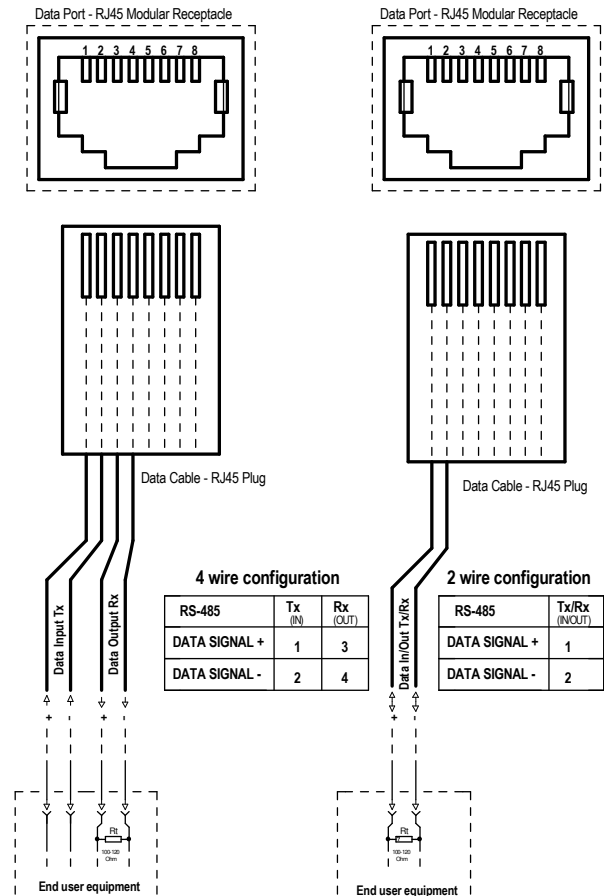
Optical Transmitter for : Composite Video signal &  
1 x RS-485 Data Channel

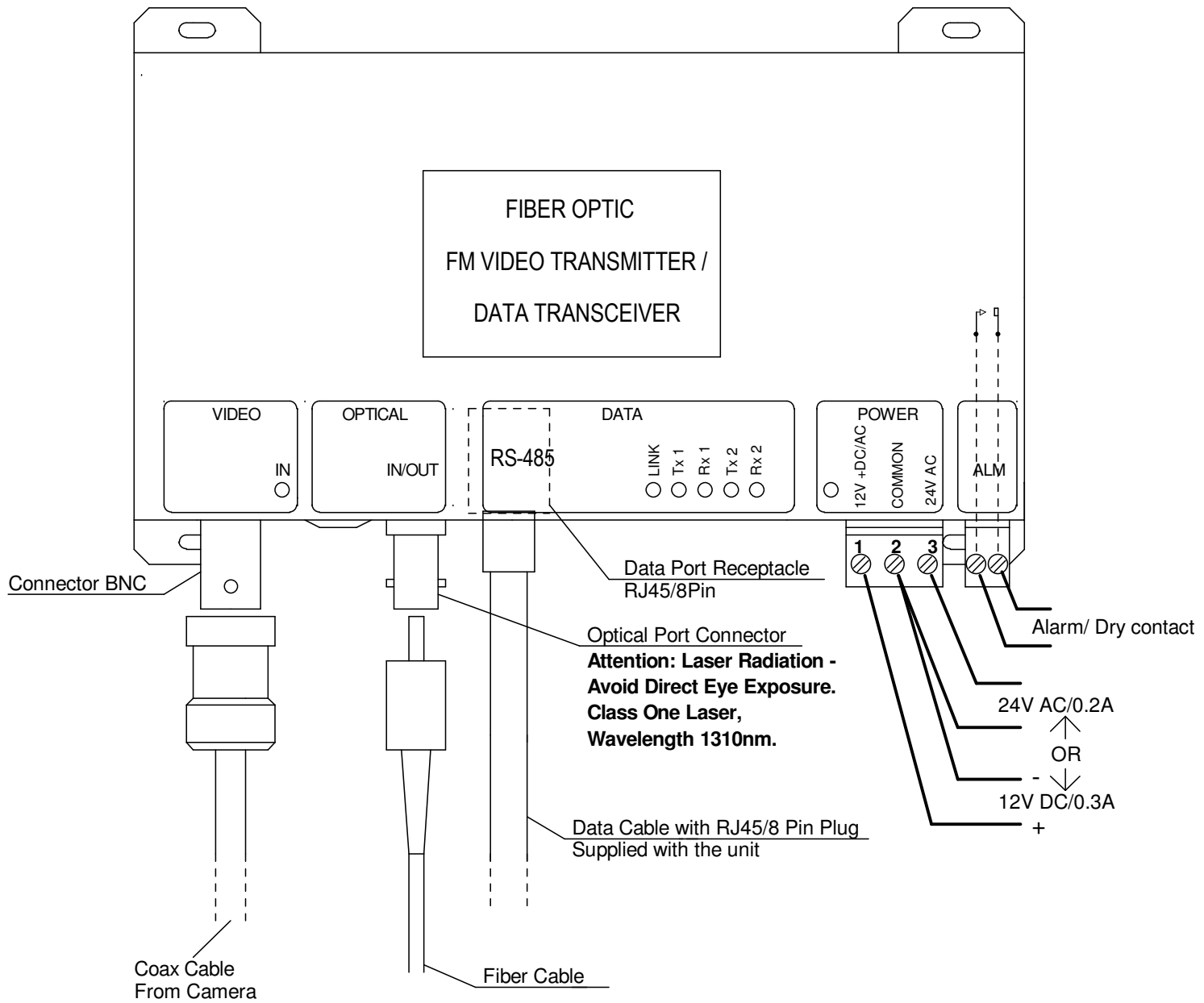
Optical Receiver for : 1 x RS-485 Data Channel

**Indicators** :- All indicators are located on the top of the module.

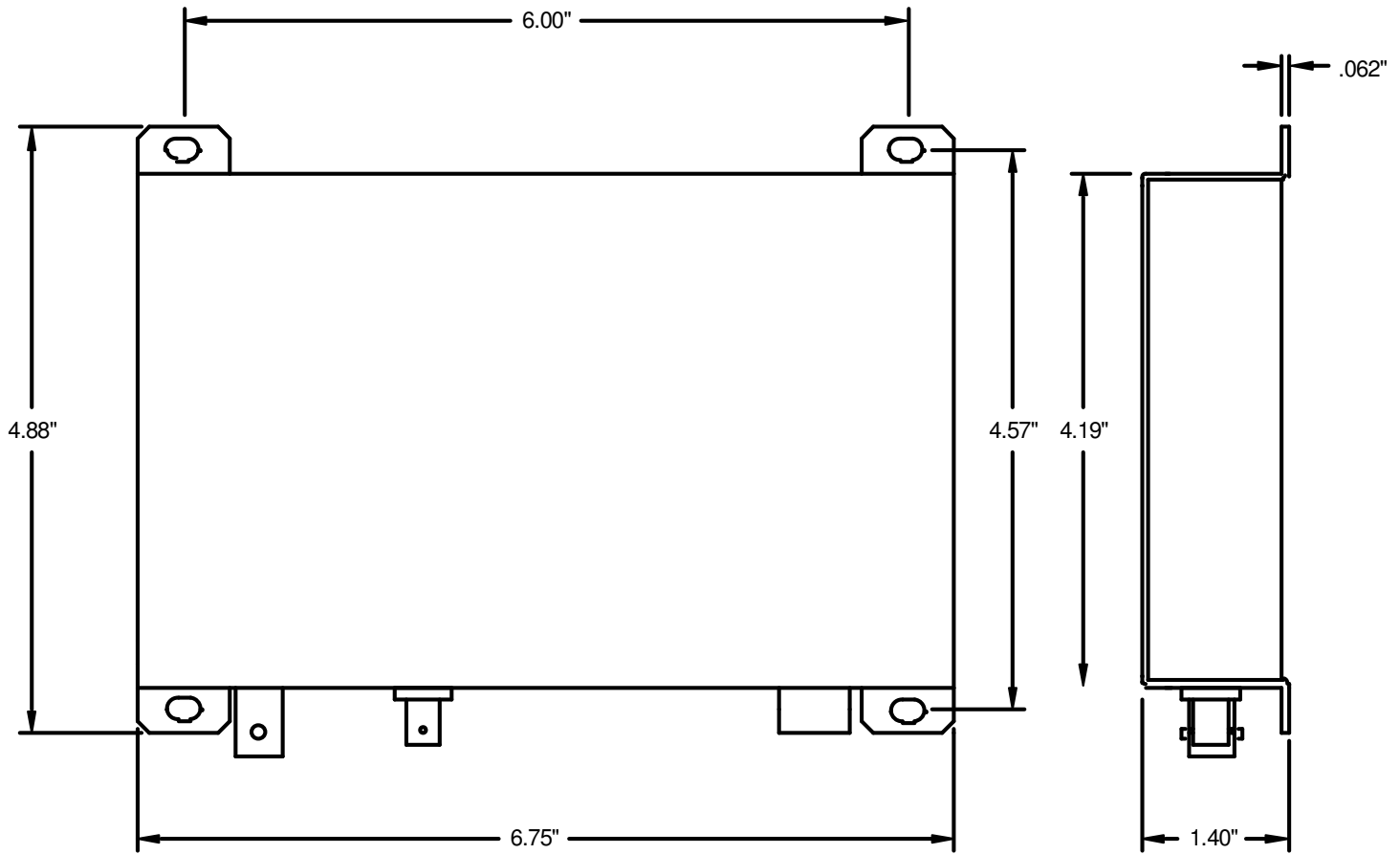
Indicator		
Power	off	The unit is not powered
	green	Power connected
Video Input	off	No video input or insufficient video signal present
	green	Composite Video signal present
Data Link	off	No received optical signal present
	green	Optical signal received
Data Tx1	off	No data signal present at the optical transmitter Ch.1 input
	red	Data signal is present at the optical transmitter Ch.1 input
Data Rx1	off	No data signal present at the optical receiver Ch.1 output
	green	Data signal is present at the optical receiver Ch.1 output
Data Tx2	off	No control signal present at the optical transmitter Ch.2 input
	red	Control signal is present to the optical transmitter Ch.2 input
Data Rx2	off	No control signal present at the optical receiver Ch.2 output
	green	Control signal is available at the optical receiver Ch.2 output

## Data Connector Pinouts





**155S-VT/DX-M1 Video Transmitter / Data Transceiver Connections**



Installation Drawing