

Specifications

Video Performance*

| | |
|------------------------|-----------------------|
| Video Output Impedance | 75 ohm (unbalanced) |
| Video Output Voltage | 1Vp 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 |
| Receiving Wavelength | 1310 nm |
| Receiver Sensitivity* | -34 dBm |
| Transmitting Light Source | Laser 1550 nm |
| Optical Power Output | -8 dBm (+/- 2 dBm @ -30 °C to +85 °C) |

Data Interface

| | |
|----------------|--------------------------------|
| Data Interface | RS-232 Bi-directional – 4 wire |
| Data Rate* | Up to 200Kb/s |

* measured with 133S-VT/DX-M1ST unit as per RS-250C @ 1km for single mode optical 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 |

133S-VR/DX-M1

Fiber Optic Video Receiver & 2Ch. RS-232 Data Transceiver

Singlemode

Single Fiber Operation

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Introduction :

The Elcommtech 133S-VR/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 133S-VR/DX-M1 provides the following facilities in a 170mm x 126mm x 34mm free standing module.

Optical Receiver for :- Composite Video signal & 2x RS-232 Data Channels

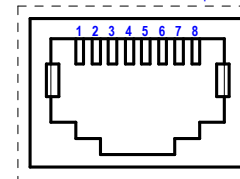
Optical Transmitter for :- 2x RS-232 Data Channels

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

| Indicator | | |
|--------------|-------|---|
| Power | off | The unit is not powered |
| | green | Power connected |
| Video Output | off | No link - no carrier signal present |
| | red | Link on – carrier signal present, but no 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 data signal present at the optical transmitter Ch.2 input |
| | red | Data signal is present to the optical transmitter Ch.2 input |
| Data Rx2 | off | No data signal present at the optical receiver Ch.2 output |
| | green | Data signal is available at the optical receiver Ch.2 output |

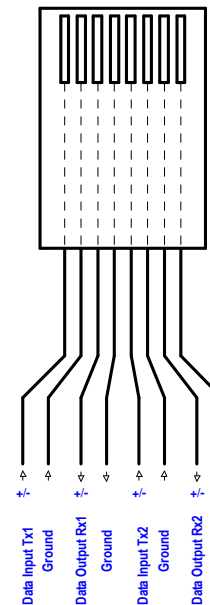
Data Connector Pinouts

Data Port - RJ45 Modular Receptacle

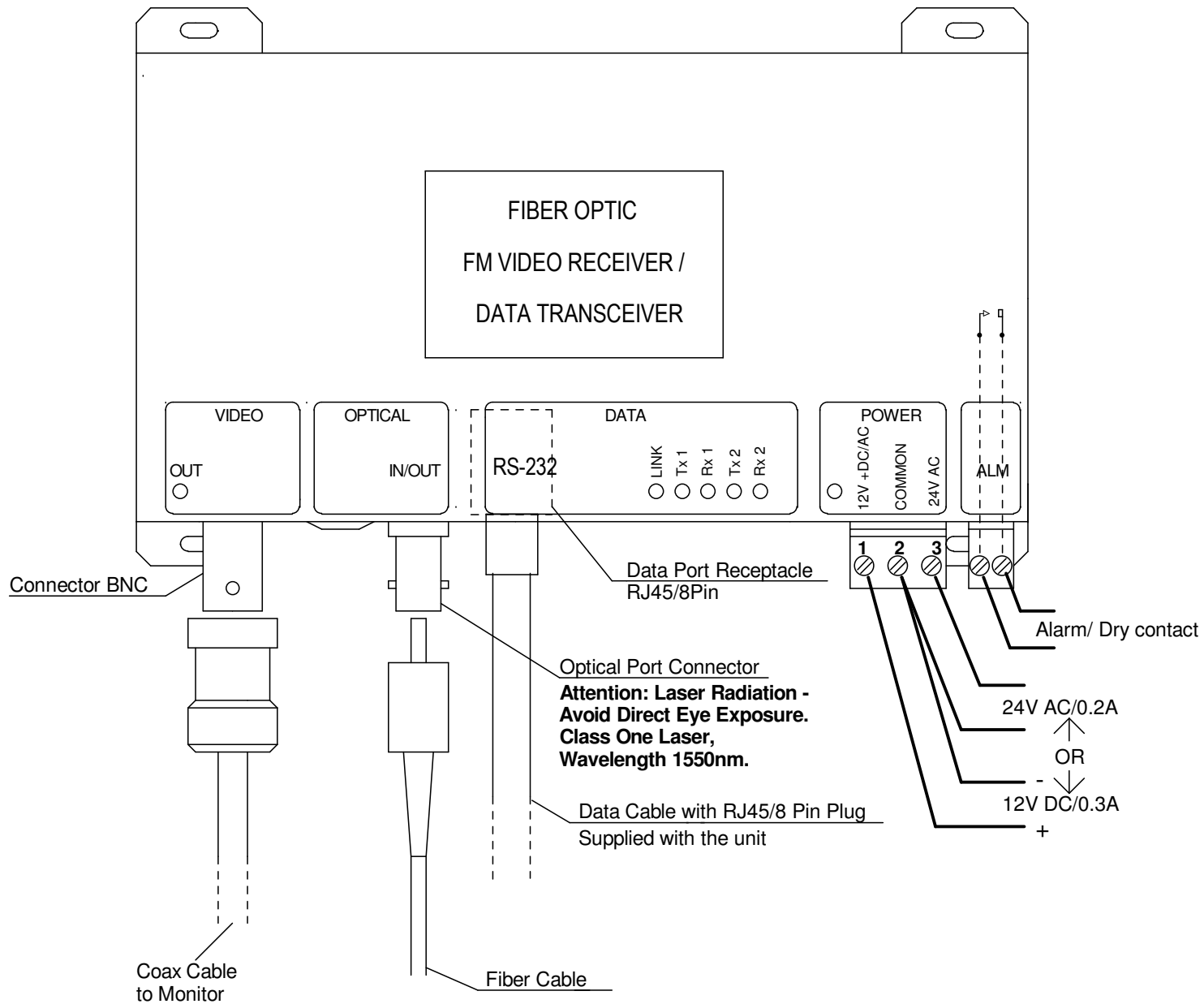


RS-232 Data Port Connector

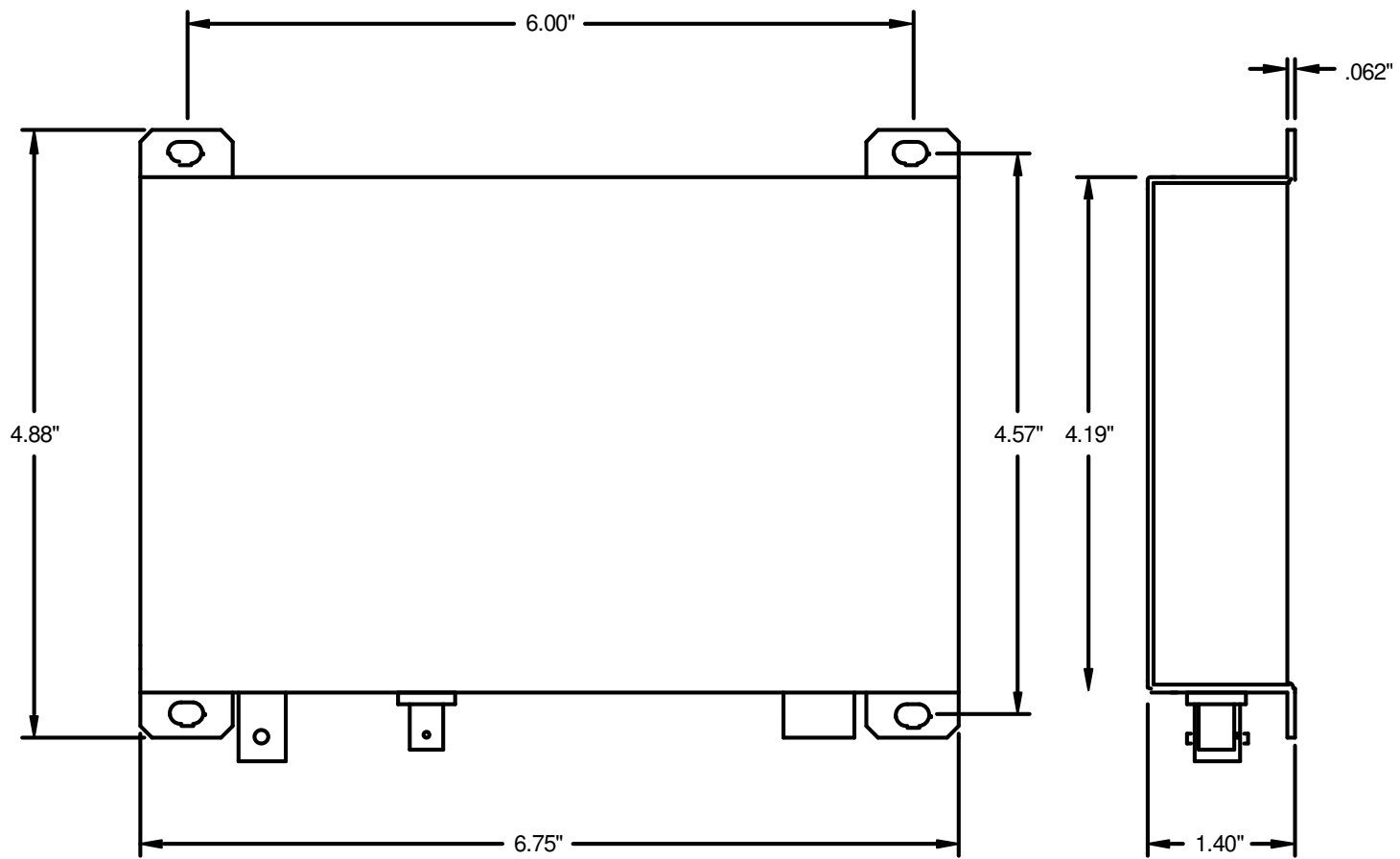
| RS-232 | Tx1 (IN1) | Rx1 (OUT1) | Tx2 (IN2) | Rx2 (OUT2) |
|-----------------|-----------|------------|-----------|------------|
| DATA SIGNAL +/- | 1 | 3 | 5 | 7 |
| GROUND | 2 | 4 | 6 | 8 |



Data Cable - RJ45 Plug



133S-VR/DX-M1 Video Receiver / Data Transceiver Connections



Installation Drawing