ELCOMMTECH Corporation

114HS-VT/DX-M1

Fiber Optic

Digital Video Transmitter
&
2Ch. TTL Data Transceiver

Singlemode

Single Fiber Operation

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Specifications

Video Performance

Video Input Impedance	75 ohm (balanced)
Video Input Voltage	1V p-p NTSC, 1.3Vp-p PAL
Video Connector	BNC
Frequency Response	10 Hz to 6.5MHz(-1dB)
Signal to Noise Ratio	65dB as per RS250C
Differential Gain	< 0.6%
Differential Phase	< 0.5 deg
K-2T Factor	<1.0%

Optical Performance

Light Source	Laser
Wavelength	1310/1550nm
Optical Connector	ST, FC or SC
Single mode - Core Diameter	8 - 10u
Optical Power Output	-5 dBm
Receiver Sensitivity	- 33dBm
Loss Budget	28dB
Operating Temperature	-30deg C to +65deg C
Dimensions	172mm(L), 126mm(W), 36mm(D)
Power Requirements	12V AC or DC @ 350mA 24VAC @ 250mA

Data Interface

Data Interface	2 x TTL Duplex
Data Rate	Up to 1.6 Mb/sec

Introduction :

The Elcommtech 114HS-VT/DX-M1 forms part of a singlemode, single fiber video and data fiber optic transmission system.
Using high speed digital signal processing and operating as a dual window 1310/1550nm single fiber unit, the 114HS-VT/DX-M1 provides the following facilities in a 172mm x 126mm x 36mm free standing module.

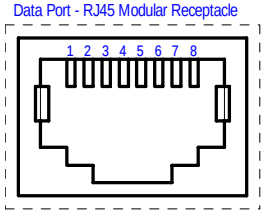
Optical Transmitter for : Composite Video signal &
2x TTL Data Channels

Optical Receiver for : 2x TTL Data Channels

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

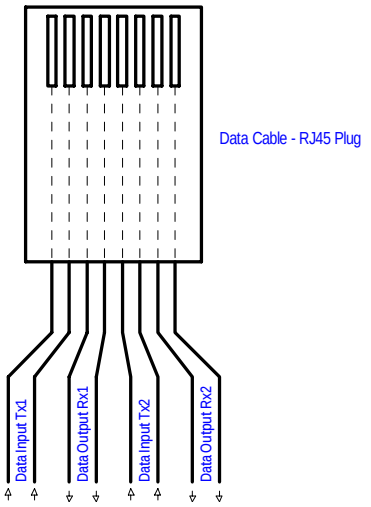
Indicator		
Power	off	The unit is not powered
	green	Power connected
Video Input	off	No video input or insufficient video signal present
	green	Composite Video signal present
Data Link	off	No received optical signal present
	green	Optical signal received
Data Tx1	off	No data signal present at the optical 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.1output
	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

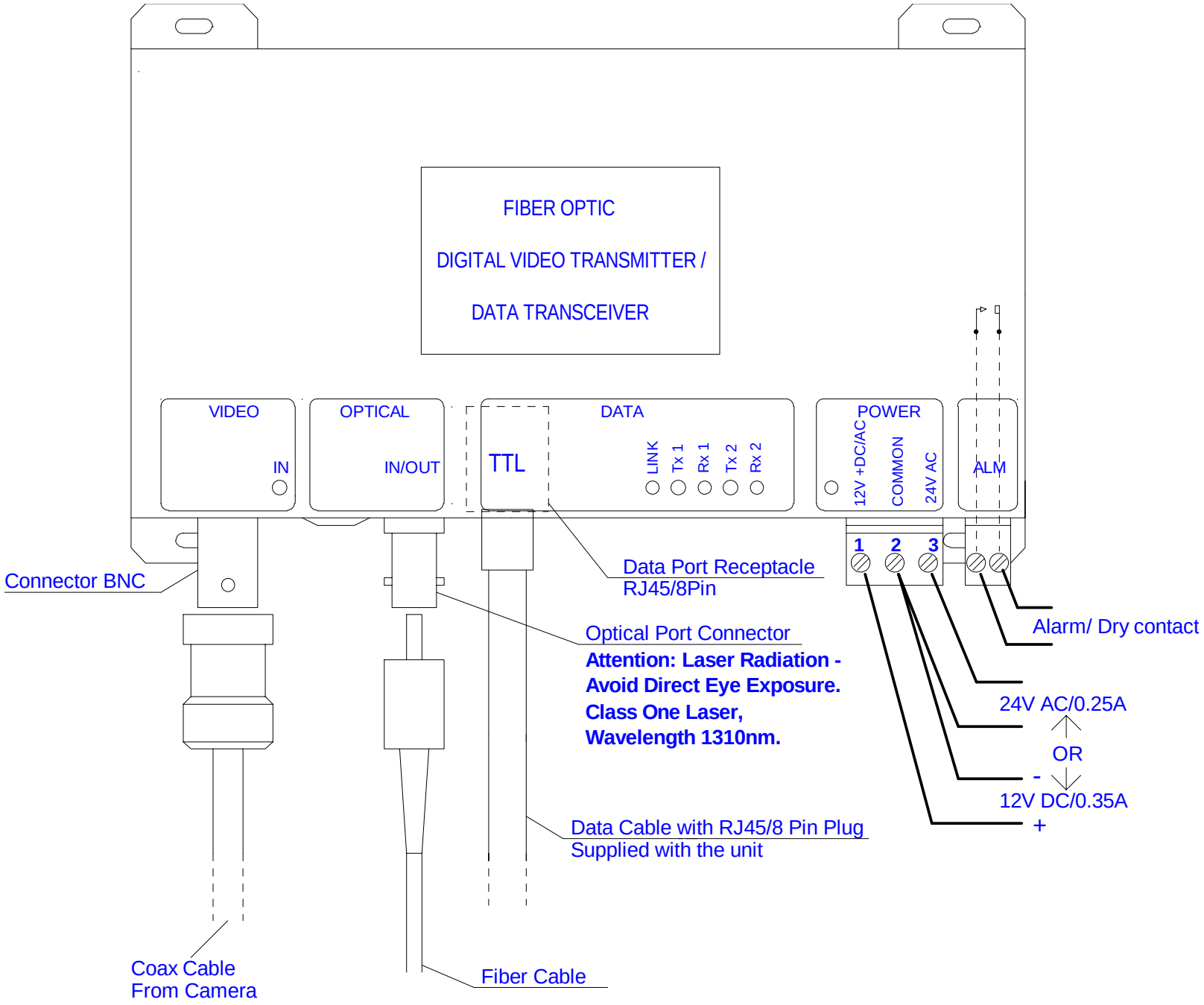
Data Connector Pinouts



TTL Data Port Connector

TTL	Tx1 (IN1)	Rx1 (OUT1)	Tx2 (IN2)	Rx2 (OUT2)
DATA SIGNAL +	1	3	5	7
COMMON GND	2	4	6	8





114HS-VT/DX-M1 Video Transmitter / Data Transceiver Connections