

ECT5402 4 CHANNEL VIDEO/10 BIT AND 2 CHANNEL DATA DIGITAL LINK



Video	Data
4	2
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The ECT5402 system provides a high performance link for transmitting up to four unidirectional composite video and two unidirectional or bi-directional data signals over a single fiber optic cable.

The system features broadcast video quality providing 10-bit video processing with uncompressed digital transmission. ECT5402 utilizes high speed Analog-to-Digital and Digital-to-Analog Conversion with 10-Bit Resolution, Digital Signal Processing, Time Division Multiplexing, Fibre Optic Transmission at a data rate of up to 1.4 Gbit/sec and high speed data transfer capability.

ORDERING INFORMATION

- 5402F-VT/DTU-X1Z – 4 ch. video & 2 ch. data transmitter
- 5402F-VR/DRU-X1Z – 4 ch. video & 2 ch. data receiver
- 5402F-VT/DRU-XYZ – 4 ch. video transmitter & 2 ch. data receiver
- 5402F-VR/DTU-XYZ – 4 ch. video receiver & 2 ch. data transmitter
- 5402F-VT/DXU-XYZ – 4 ch. video transmitter & 2 ch. data transceiver
- 5402F-VR/DXU-XYZ – 4 ch. video receiver & 2 ch. data transceiver

- F = M for multimode 850nm
- = S for singlemode 1310nm
- = S(15) for singlemode 1550nm
- U = 1 for TTL, 3 for RS-232, 4 for RS-422, 5 for RS-485, 9 for Contact Closure
- X = C for card style*
- = M for module style
- Y = 1, 2 for number of fiber
- Z = FC, ST, SC for optical connectors

*compatible with USR series chassis

FEATURES

- ❑ Broadcast Video Quality with 10-bit Uncompressed Video Processing
- ❑ Supports NTSC, PAL, SECAM and Component (YUV, RGB, Y/C) Video Formats
- ❑ Four composite Video Channels per Single Fiber / Single Wavelength
- ❑ Two RS-232, RS-422, TTL/CMOS, Contact Closure or one RS-485 Data Channel
- ❑ Input Video Cable Equalization
- ❑ Multifunction Power and Signal Status Indicators

Fiber Type	Multimode	Singlemode
Optical Core Diameter	50µ or 62.5µ	8/10µ
Operating Wavelength	850/1310 nm	1310/1550 nm
Optical Power Source	Laser	Laser
Optical Power Output	- 3 dBm	- 3 dBm*
Receiver Sensitivity	-20 dBm	-22 dBm
Optical Connectors	ST, SC	FC, ST, SC
Maximum Length of Fiber	1 km	20 km

*per wavelength with +/- 1 dBm variation; higher power laser sources are available per special request.

Video Bandwidth @1dB	7 MHz
Video Input	75Ω balanced
Video Input Level	NTSC: 1.0 V p-p, PAL: 1.3 V p-p
Signal-to-Noise Ratio	64 dB*
Differential Gain	< 0.5 %
Differential Phase	< 0.5 °
Field Tilt	< 0.5 %
Luminance	
Non-Linearity	< 0.5%
Chrominance/ Luminance Delay	< 20ns
Supported Data Formats: Simplex or Duplex	RS-232, RS-422, TTL, Contact Closure
Duplex	RS-485
Data Channel Bit-Rate	Up to 1.6 Mb/sec
Bit Error Rate	10 ⁻⁹
Power Requirements	12 V DC @ 0.7 A
Dimensions	11.55"(295mm) x 5.2"(133mm) x x 2"(51mm)

*measured with ECT5400 receiver as per RS-250C



Elcommtech Corp. 2620 Ocean Parkway, Suite 4H, Brooklyn, NY 11235
 Tel (718) 743-2869 • Fax (718)648-3642 • E-mail sales@elcommtech.com
<http://www.elcommtech.com>