

ECT1122 1 CH. VIDEO/10 BIT, 2 CH. AUDIO/24 BIT AND 2 CH. DATA DIGITAL OPTICAL LINK



FEATURES

- ❑ Broadcast Video Quality with 10-bit Uncompressed Video Processing
- ❑ Supports NTSC, PAL, SECAM and Component (YUV, RGB, Y/C) Video Formats
- ❑ Broadcast Quality 1 x Stereo or 2 x Mono Audio Channels
- ❑ 2 x RS-232/RS-422/TTL/Contact Closure or 1 x RS-485 Data Channels
- ❑ Multifunction Power and Signal Status Indicators

Video	Audio	Data
1	2	2
→	→	↔

The ECT1122 system provides a high performance link for transmitting of one unidirectional composite video, two audio and two unidirectional or bi-directional data channels over a single fiber optic cable. The system features broadcast video quality providing 10-bit video processing with uncompressed digital transmission.

ECT1122 utilizes high speed Analog-to-Digital and Digital-to-Analog Conversion with 10-Bit Resolution for video and 24-Bit for audio, Digital Signal Processing, Time Division Multiplexing and Fibre Optic Transmission at a data rate of up to 450 Mbit/sec.

Fiber Type	Multimode	Singlemode
Optical Core Diameter	50 μ /62.5 μ	8/10 μ
Operating Wavelength	850	1310/1550 nm
Optical Power Source	Laser (VCSEL)	Laser
Optical Power Output	-3 dBm	-3 dBm*
Receiver Sensitivity	-28 dBm	-31 dBm
Optical Connectors	ST, SC	FC, ST, SC

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

Video Channel Characteristics

Video Bandwidth @1dB	10 mHz*
Video Input	75 Ohm balanced
Video Output	75 Ohm unbalanced
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
K-2T Factor	< 1.0%

*higher video bandwidth (up to 25 MHz) is available per special request

**measured with ECT1122 receiver as per RS-250C



ECT100 SERIES

Audio Channel Characteristics

Audio Input	600 Ω or 10K, Balanced
Audio Input Levels	0 to +18 dBm
Audio Output	Balanced or Unbalanced
Audio Output Levels	0 to +18 dBm (balanced, 10K load), 0 to +12dBm (unbalanced, 10K load)
Audio Bandwidth	10Hz to 20 kHz
Audio Signal-to-Noise Ratio	> 85 dB (0 dBm, 10K Load)
THD	< 0.1% (0 dBm, 10K Load)

Data Channel Characteristics

Supported Data Formats:	RS-232, RS-422, TTL, Contact Closure
Simplex or Duplex	RS-485, Up-the-Coax
Duplex	
Data Channel Bit-Rate	Up to 2.5 Mb/sec*
Bit Error Rate	10^{-9}

* higher data rate (up to 5 Mb/sec) is available per special request

Power Requirements	11 - 14 VDC @ 400mA 21 - 27VAC @ 270mA
Operating Temperature	-30°C to +70°C (-22°F to +158°F)
Dimensions (without connectors):	6.7"(170mm) x 4.95"(126mm) x 1.32"(34mm)

ORDERING INFORMATION

1120F-VATU-M1Z - 1 ch. video & 2 ch. audio transmitter module
1120F-VARU-M1Z - 1 ch. video & 2 ch. audio receiver module
1122F-VADTU-M1Z - 1 ch. video, 2 ch. audio & 2 ch. data transmitter module
1122F-VADRU-M1Z - 1 ch. video, 2 ch. audio & 2 ch. data receiver module
1122F-VAT/DRU-MYZ - 1 ch. video, 2 ch. audio transmitter & 2ch. data receiver module
1122F-VAR/DTU-MYZ - 1 ch. video, 2 ch. audio receiver & 2 ch. data transmitter module
1122F-VAT/DXU-MYZ - 1 ch. video, 2 ch. audio transmitter & 2ch. data transceiver module
1122F-VAR/DXU-MYZ - 1 ch. video, 2 ch. audio receiver & 2 ch. data transceiver module

F = M for multimode 850nm
= S for single mode 1310nm
= S(15) for single mode 1550nm
U = 1 for TTL, 3 for RS-232, 4 for RS-422, 5 for RS-485, 6 for Up-the- Coax, 9 for Contact Closure
Y = 1, 2 for number of fibers
Z = ST, FC, SC for optical connectors



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>