ECT1122

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



Video	Audio	Data
1	2	2
\rightarrow	\rightarrow	\leftrightarrow

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 1.4 Gbit/sec.

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

Fiber Type	Multimode	Singlemode
Optical Core Diameter	50μ/62.5μ	8/10µ
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
Receiver Sensitivity**	-26 dBm	-29 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 officialities official documents	
Video Bandwidth @ 2 dB*	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/	< 20ns
Luminance Delay	
K-2T Factor	< 1.0%

^{*} higher video bandwidth (up to 30 MHz) is available per special request; **measured with ECT1122 receiver as per RS-250C



^{**} for one-fiber configuration with internal WDM

Audio Channel Characteristics

Audio Input	600 Ω or 10K, Balanced
Audio Output	Balanced or Unbalanced
Audio In/Out Level (max)	+18 dBm/balanced or
	+12 dBm/unbalanced
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:	
Simplex or Duplex	RS-232, RS-422, TTL, Contact Closure
Duplex	RS-485, Up-the-Coax
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 - 15 VDC @ 400mA
·	21 - 27 VAC @ 300mA
Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Dimensions (without	,
connectors):	6.7"(170mm) x 4.95"(126mm) x 1.32"(34mm)

ORDERING INFORMATION

1120**F**-VAT**U**-M1**Z** - 1 ch. video & 2 ch. audio transmitter module

1120F-VARU-M1Z - 1 ch. video & 2 ch. audio receiver module

1122**F**-VADT**U**-M1**Z** - 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/DT**U-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

= **S** for single mode receiver or 1310nm transmitter

= **SP** for high power (0 dBm) 1310nm transmitter option

= **S(15)** for single mode 1550nm transmitter

= **S(15D)** for single mode 1550 nm transmitter with DFB laser

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

