

ECT144H ONE VIDEO WITH TWO DUPLEX RS-422 DATA CHANNELS DIGITAL OPTICAL LINK



Video	Data
1	2
→	↔

ECT144H system provides high performance link for transmitting unidirectional composite video channel along with two bi-directional RS-422 data channels over one or two fibers. The system features broadcast video quality providing 10-bit video processing with uncompressed digital transmission. ECT144H 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 1400 Mbit/sec and high speed RS-422 data transfer capability.

ORDERING INFORMATION

144HE-VT/DX/M/MYZ – video Tx/data TRx module
 144HE-VR/DX/M/MYZ – video Rx/data TRx module
 Tx - transmitter, Rx – receiver, TRx - transceiver

E = **M** for multimode 1 fiber or 850nm/2 fiber
 = **S** for single mode 1 fiber or 1310nm/2 fiber
 = **S(15)** for single mode 1550nm/2 fiber

N = 1.6, 5, 10* for data rate maximum in Mb/sec**

Y = 1 for one fiber system
 = 2 for dual fiber system

Z = ST, FC, SC for optical connectors

*for one data channel only;

**specified by customer.

FEATURES

- ❑ Broadcast Video Quality
- ❑ Compatible with NTSC, PAL and SECAM Transmission
- ❑ High Speed Duplex RS-422 Data Ports
- ❑ Multimode and Singlemode Versions
- ❑ Power and Signal Status Indicators

Operating Wavelength	850 nm Video	1300 nm Data	1310/1550nm Video/Data
Optical Core Diameter	50μ/62.5μ		8/10μ
Optical Power Source	VCSEL	LED	Laser
Optical Power Output*	-3 dBm	-14 dBm	-3 dBm
Receiver Sensitivity	-31 dBm	-34 dBm	-34 dBm
Receiver Sensitivity**	-29 dBm	-32 dBm	-32 dBm
Optical Connectors	ST, SC		FC, ST, SC

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

**for one-fiber configuration with internal WDM.

Video Bandwidth @1dB*	7 mHz
Video Conversion	
Resolution	10 bit
Video Input	75 Ohm balanced
Video Output	75 Ohm unbalanced
Video Input/Output 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 %
Data Interface	RS-422
Data Rate	DC - 1.6 Mb/sec or DC - 5 Mb/sec
Data Rate (1Ch. only)***	DC - 10 Mb/sec
Bit Error Rate	10 ⁻⁹
Power Requirements	11 - 14 VDC @ 350mA 21 - 27VAC @ 250mA
Operating Temperature	-30°C to +70°C (-22°F to +158°F)
Module Dimensions	6.7"(170mm) x 4.95"(126mm) x 1.32"(34mm)

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

** measured as per RS-250C @ 4km, 8-9μ cable;

*** available per special request.



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