

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



Video	Data
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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/DXN-MYZ – video TX/data TRX module  
 144HE-VR/DXN-MYZ – video RX/data TRX module  
 TX - transmitter, RX – receiver, TRX - transceiver

**E** = **M** for multimode 850nm/TX  
 = **S** for single mode 1310nm/TX  
 = **S(15)** for single mode 1550nm/TX

**N** = **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.

**Note:** The specifications are subject to change without notice.

### 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	850/1300 nm	1310/1550 nm
Optical Core Diameter	50µ/62.5µ		8/10µ
Optical Power Source	VCSEL	LED	Laser
Optical Power Output*	-3 dBm	-14 dBm	-3 dBm
Video Receiver Sensitivity	-30 dBm		-33 dBm
Video Receiver Sensitivity**	-28 dBm		-31 dBm
Data Receiver Sensitivity	-33 dBm	-36 dBm	-36 dBm
Data Receiver Sensitivity**	-31 dBm	-34 dBm	-34 dBm
Optical Connectors	ST, SC		ST, SC, FC

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

\*\* for one-fiber configuration with internal WDM.

Video Bandwidth @ 2 dB*	10 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 – 2.5 Mb/sec DC - 5 Mb/sec, 10 Mb/sec***
Bit Error Rate	10 <sup>-9</sup>
Power Requirements	11 - 14 VDC @ 350mA 21 - 27VAC @ 250mA
Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Module Dimensions	6.7"(170mm) x 4.95"(126mm) x 1.32"(34mm)

\* higher video bandwidth (up to 26 MHz) is available per special request;

\*\* measured as per RS-250C @ 1km for single mode optical cable;

\*\*\* available per special request; 10 Mb/sec - for one data channel only.

