

## ECT114H ONE VIDEO WITH TWO DUPLEX TTL/CMOS DATA CHANNELS DIGITAL OPTICAL LINK



Video	Data
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ECT114H system provides high performance link for transmitting unidirectional composite video channel along with two bi-directional TTL/CMOS data channels over one or two fibers. The system features broadcast video quality providing 10-bit video processing with uncompressed digital transmission. ECT114H 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 TTL/CMOS data transfer capability.

### ORDERING INFORMATION

114HE-VT/DXN-MYZ – video Tx/data TRx module  
 114HE-VR/DXN-MYZ – video Rx/data TRx module  
 Tx - transmitter, Rx – receiver, TRx - transceiver

**E** = M for multimode 1 fiber or 850 nm/2 fiber  
 = S for single mode 1 fiber or 1310 nm/2 fiber  
 = S(15) for single mode 1550 nm/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 TTL/CMOS 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	TTL/CMOS
Data Rate	DC - 1.6 Mb/sec or DC - 5 Mb/sec
Data Rate (1Ch. only)***	DC - 10 Mb/sec
Bit Error Rate	10 <sup>-9</sup>
Power Requirements	11 - 14 VDC @ 350mA 21 - 27 VAC @ 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.

