

ECT144 ONE VIDEO WITH TWO DUPLEX RS-422 DATA CHANNELS FM OPTICAL LINK



Video	Data
1	2
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ECT144 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 CCTV professional video quality and high speed RS-422 data transfer capability. ECT144 utilizes linear frequency modulation and very low noise transmission technology to assure high quality and stability.

ORDERING INFORMATION

144E-VT/DX-MYZ – video Tx/RS-422 data TRx module
 144E-VR/DX-MYZ – video Rx/RS-422 data TRx module
 Tx - transmitter, Rx – receiver, TRx - transceiver

E = M for multimode 1 fiber or 850nm/2 fiber
 = M(13) for multimode 1300nm/2 fiber
 = S for single mode 1 fiber or 1310nm/2 fiber
 = S(15) for single mode 1550nm/2 fiber

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

Z = ST, FC, SC for optical connectors

FEATURES

- ❑ CCTV Professional Video Quality
- ❑ Balanced Video Input
- ❑ 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	1300 nm	1310/1550nm
Optical Core Diameter	50μ/62.5μ		8/10μ
Optical Power Source	VCSEL	LED	Laser
Optical Power Output*	-8 dBm	-14 dBm	-8 dBm
Receiver Sensitivity	-30 dBm	-32 dBm	-34 dBm
Receiver Sensitivity**	-28 dBm	-30 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 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	62 dB*
Differential Gain	< 3 %
Differential Phase	< 3 °
Field Tilt	< 2 %
Luminance Non-Linearity	< 3 %
Data Interface	RS-422
Data Rate	Up to 200 Kb/s
Bit Error Rate	10 ⁻⁹
Power Requirements	11 – 14 VAC/VDC @ 300mA 21 - 27VAC @ 200mA
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)

* measured as per RS-250C @ 1km, 62.5μ cable

