

## ECT113 ONE CHANNEL VIDEO WITH ONE TTL/CMOS & ONE RS-232 DUPLEX DATA CHANNELS OPTICAL LINK



Video	Data
1	2
→	↔

ECT113 system provides high performance link for transmitting unidirectional composite video channel along with one TTL/CMOS & one RS-232 bi-directional data channels over one or two fibers. The system features CCTV professional video quality and high speed data transfer capability.

ECT113 utilizes linear frequency modulation and very low noise transmission technology to assure high quality and stability.

### ORDERING INFORMATION

113E-VT/DX-MYZ – video TX/data TRX module  
 113E-VR/DX-MYZ – video RX/data TRX module  
 TX - transmitter, RX – receiver, TRX - transceiver

**E** = **M** for multimode 850nm/TX  
 = **M(13)** for multimode 1300nm/TX  
 = **S** for single mode 1310nm/TX  
 = **S(15)** for single mode 1550nm/TX

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

**Z** = **ST, FC, SC** for optical connectors

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

### FEATURES

- ❑ CCTV Professional Video Quality
- ❑ Balanced Video Input
- ❑ Compatible with NTSC, PAL and SECAM Transmission
- ❑ High Speed Duplex TTL/CMOS & RS-232 Data Ports
- ❑ Multimode and Singlemode Versions
- ❑ Power and Signal Status Indicators

Operating Wavelength	850 nm	1300 nm	1310/1550 nm
Optical Core Diameter	50μ/62.5μ		8/10μ
Optical Power Source	VCSEL	LED	Laser
Optical Power Output*	-7 dBm	-14 dBm	-8 dBm
Video Receiver Sensitivity	-30 dBm	-34 dBm	-36 dBm
Video Receiver Sensitivity**	-29 dBm	-33 dBm	-35 dBm
Data Receiver Sensitivity	-32 dBm	-35 dBm	-37 dBm
Data Receiver Sensitivity**	-31 dBm	-34 dBm	-36 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 @ 3 dB	7 MHz
Video Input Impedance	75 Ohm balanced
Video Output Impedance	75 Ohm unbalanced
Video Input / Output Level	NTSC: 1.0 Vp., PAL: 1.3 Vp. (+1/-3 dB)
Video Input Overload	Up to 3 Vp.
Signal-to-Noise Ratio	62 dB*
Diff. Gain (-20°C to +70°C)	< 4 %
Diff. Gain (-30°C to +85°C)	< 7 %
Diff. Phase (-20°C to +70°C)	< 4 °
Diff. Phase (-30°C to +85°C)	< 7 °
Field Tilt	< 2 %
Luminance Non-Linearity (-20°C to +70°C)	< 4 %
Luminance Non-Linearity (-30°C to +85°C)	< 7 %
Data Interface	RS-422
Data Rate	Up to 200 Kb/s
Bit Error Rate	10 <sup>-9</sup>
Power Requirements	11 – 14 VAC/VDC @ 300mA 21 - 27VAC @ 200mA
Operating Temperature	-30°C to +85°C (-22°F to +185°F)
Module Dimensions	6.7"(170mm) x 4.95"(126mm) x 1.32"(34mm)

\* measured as per RS-250C @ 100m for multimode and 1km for single mode optical cable.



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