

ECT199 ONE CHANNEL VIDEO WITH TWO DUPLEX CONTACT CLOSURE DATA CHANNELS OPTICAL LINK



Video	Data
1	2
→	↔

ECT199 system provides high performance link for transmitting unidirectional composite video channel along with two bi-directional contact closure data channels over one or two fibers. The system features CCTV professional video quality and high speed contact closure data transfer capability. ECT199 utilizes linear frequency modulation and very low noise transmission technology to assure high quality and stability.

ORDERING INFORMATION

199E-VT/DX-MYZ – video TX/contact closure data TRX module
 199E-VR/DX-MYZ – video RX/ contact closure data TRX module
 TX - transmitter, RX – receiver, TRX - transceiver

E = M for multimode 850 nm/TX
 = M(13) for multimode 1300 nm/TX
 = S for single mode 1310 nm/TX
 = S(15) for single mode 1550 nm/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 Contact Closure 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 & Data Receiver Sensitivity	-31 dBm	-33 dBm	-35 dBm
Video & Data Receiver Sensitivity**	-30 dBm	-32 dBm	-34 dBm
Optical Connectors	ST, SC		FC, ST, SC

* with +/- 2 dBm variation @ -30 °C to +85 °C; 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 ⁻⁹
Power Requirements	11 – 14 VDC @ 300mA 21 – 27 VAC @ 200mA

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

