

ECT102

ONE CHANNEL VIDEO WITH TWO DUPLEX DATA CHANNEL FM OPTICAL LINK



Video	Data
1	2
→	↔

ECT102 system provides high performance link for transmitting unidirectional composite video channel along with two duplex data channels over one or two fibers. The system features CCTV professional video quality and two channel data transfer capability.

ECT102 utilizes linear frequency modulation and very low noise transmission technology to assure high quality and stability.

ORDERING INFORMATION

102E-VT/DXF-MYZ – video TX/data TRX module

102E-VR/DXF-MYZ – video RX/data TRX module

TX - transmitter, RX – receiver, TRX - transceiver

E = **M** for multimode receiver and 850 nm transmitter
 = **S** for single mode receiver and 1310 nm transmitter
 = **S(15)** for single mode receiver and 1550nm transmitter
 = **SD, S(15)D** for DFB lasers option for transmit

F = **1** for TTL/CMOS data format;
3 for RS-232 data format;
4 for RS-422 data format;
5 for RS-485 data format;
7 for 20 mA current loop data format;
9 for contact closure data format.

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

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

FEATURES

- ❑ CCTV Professional Video Quality
- ❑ Balanced Video Input
- ❑ Compatible with NTSC, PAL and SECAM Transmission
- ❑ Two Duplex Multi-format Data Channel
- ❑ Multimode and Singlemode Versions
- ❑ Power and Signal Status Indicators
- ❑ Dry contact lost link alarm
- ❑ 12 VDC or 24 VAC Power Supply

Operating Wavelength	850 nm	1310/1550 nm
Optical Core Diameter	50μ/62.5μ	8/10μ
Optical Power Source	VCSEL	Laser
Optical Power Output*	-4 dBm	-6 dBm
Video & Data Receiver Sensitivity	-30 dBm	-34 dBm
Video & Data Receiver Sensitivity**	-28 dBm	-33 dBm
Optical Connectors	ST, SC	FC, ST, SC

*with +/- 1 dBm variation; measured with multimode 62.5μ or single mode 8-10μ 1metre patch cord.

** 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*	60 dB
Differential Gain (max)	4%
Differential Phase (max)	4°
Field Tilt (max)	2%
Luminance Non-Linearity	4%
Data Rate	Up to 150 Kb/s
Bit Error Rate	10 ⁻⁹
Power Requirements	11 – 14 VDC @ 300mA 21 – 27 VAC @ 200mA
Operating Temperature	-20°C to +70°C (-4°F to +158°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.

Note: The specifications are subject to change without notice.



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