ECT102

ONE CHANNEL VIDEO WITH TWO DUPLEX DATA CHANNEL FM OPTICAL LINK



Video	Data
1	2
\rightarrow	\leftrightarrow

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. ECT102 Video TX and Data TRX is fully compatible with ECT204.

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 transmitter

Note: The specifications are subject to change without notice.

- **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

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

*with +/- 1 dBm variation; measured with multimode 62.5μ or single mode $8-10\mu$ 1 metre 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.
Signal-to-Noise Ratio*	62 dB
Differential Gain (max)	4%
Differential Phase (max)	4°
Field Tilt (max)	2%
Luminance Non-Linearity	4%
(max)	
Data Rate	DC to 200 Kb/s
Bit Error Rate	10 ⁻⁹
Operating Temperature	-20°C to +70°C
	(-4°F to +158°F)
Module Dimensions	6.7" x 4.95" x 1.32"
(w/o connectors)	170 mm x 120 mm x 34 mm

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

