## ECT100B-R FM VIDEO OPTICAL LINK WITH 0 - 5 V SIGNAL LEVEL RANGE AND 30 MHZ BANDWIDTH





The ECT100B-R system provides high performance link for unidirectional transmission of video signal 0 - 5 V over a fiber optic cable. The ECT100B-R system is designed to be used a remote transmission solution for radar and special purpose display applications. The link can be also used to transmit video gen-lock, sync, and component video signals over fiber optic cable.

The ECT100B-R FM transmitter/receiver are fully compatible with ECT400B-R type systems allowing for mixed configurations when required.

The ECT100B-R utilizes linear frequency modulation and very low noise transmission technology to assure high quality and stability.

## **FEATURES**

- □ Remote Transmission Solution for Radar Display Applications
- □ Composite and Component Video Transmission
- □ Video Gen-Lock and Sync Transmission
- ☐ Isolates EMI, RFI, Ground Loops
- Balanced Video Input
- Multimode and Singlemode Versions
- High Accuracy In/Out Signal Transmission with No Adjustments
- 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*	-3 dBm**	-14 dBm**	-4 dBm
Receiver Sensitivity	-31 dBm	-33 dBm	-35 dBm
Optical Connectors	ST, SC		FC, ST, SC

<sup>\*</sup> with +/- 1 dBm variation; higher power laser sources are available per special request;

<sup>\*\*</sup> measured with 62.5 $\mu$  multimode 1m patch cord.

System Bandwidth @ 3 dB	10 Hz – 30 MHz	
Signal Input Impedance	75 Ohm	
(transmitter)	universal: balanced or unbalanced	
Input/Output Signal Level	0 - 5 V @ 75 Ohm	
Signal-to-Noise Ratio*	64 dB	
Differential Gain*	< 4%	
Differntial Phase*	< 4°	
Luminance Non-Linearity	<4%	
Sync Tilt	< 1 %	
(standard window signal)		
Power Requirements	11 - 14 VDC @ 200mA,	
(transmitter)	21 - 27 VAC @ 150mA	
Power Requirements	12 - 13 VDC @ 250mA/regulated	
(receiver)		
Operating Temperature	-30°C to +70°C (-22°F to +158°F)	
Tx Module Dimensions	3.20"(81mm) x 3.72"(95mm) x	
(without connectors)	1.1 <sup>"</sup> (28mm)	
Rx Module Dimensions	4.17"(106mm) x 3.65"(93mm) x	
(without connectors)	1.1"(28mm) `	

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



## ORDERING INFORMATION

100B**E**-VT-M1**Z**-R – Video transmitter module

100BE-VR-M1Z-R - Video receiver module

- **E** = **M** for multimode 850 nm
  - **= M(13)** for multimode 1300 nm
  - **= S** for single mode receiver or 1310 nm transmitter
  - **= SP** for single mode high power (=/> 0 dBm) 1310 nm transmitter
  - = SPD for single mode high power (=/> 0 dBm) 1310 nm / DFB transmitter
  - = S(15) for single mode 1550 nm transmitter
  - = S(15)P for single mode high power (=/> 0 dBm) 1550 nm transmitter
  - = S(15)D for single mode 1550 nm / DFB transmitter
  - = S(15)PD for high power (=/> 0 dBm) 1550 nm / DFB transmitter
  - = S(W) for single mode CWDM / DFB transmitter
  - **= S(W)P** for high power (=/> 0 dBm) CWDM / DFB transmitter

CWDM wavelength **(W)**: **14.7**(1470 nm), **14.9**(1490 nm), **15.1**(1510 nm), **15.3**(1530 nm), **15.5**(1550 nm), **15.7**(1570nm), **15.9**(1590 nm), **16.1**(1610 nm).

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

Note: The specifications are subject to change without notice.

