

## 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

<b>Operating Wavelength</b>	850 nm	1300 nm	1310/1550nm
<b>Optical Core Diameter</b>	50μ/62.5μ		8/10μ
<b>Optical Power Source</b>	VCSEL	LED	Laser
<b>Optical Power Output*</b>	-3 dBm	-14 dBm	-3 dBm
<b>Receiver Sensitivity</b>	-31 dBm	-33 dBm	-35 dBm
<b>Optical Connectors</b>	ST, SC		FC, ST, SC

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

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

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



## ORDERING INFORMATION

100BE-VT-M1Z-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 ( $\geq 0$  dBm) 1310 nm transmitter
- = **SPD** for single mode high power ( $\geq 0$  dBm) 1310 nm / DFB transmitter
- = **S(15)** for single mode 1550 nm transmitter
- = **S(15)P** for single mode high power ( $\geq 0$  dBm) 1550 nm transmitter
- = **S(15)D** for single mode 1550 nm / DFB transmitter
- = **S(15)PD** for high power ( $\geq 0$  dBm) 1550 nm / DFB transmitter
- = **S(W)** for single mode CWDM / DFB transmitter
- = **S(W)P** for high power ( $\geq 0$  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.



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