

ECT100B-R FM VIDEO OPTICAL LINK WITH 0 - 5 V SIGNAL LEVEL RANGE AND 26 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	-3 dBm
Receiver Sensitivity	-30 dBm	-34 dBm	-36 dBm
Optical Connectors	ST, SC		FC, ST, SC

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

System Bandwidth @ 3 dB	10 Hz – 26 MHz
Signal Input Impedance (transmitter)	75 Ohm
Input/Output Signal Level	universal: balanced or unbalanced
Signal-to-Noise Ratio*	0 - 5 V @ 75 Ohm
Differential Gain*	64 dB
Differential Phase*	< 3%
Sync Tilt (standard window signal)	< 3°
Power Requirements (transmitter)	< 1%
Power Requirements (receiver)	11 - 14 VDC @ 200mA, 21 - 27 VAC @ 150mA
Operating Temperature	12 - 13 VDC @ 250mA/regulated
Tx Module Dimensions (without connectors)	-30°C to +70°C (-22°F to +158°F)
Rx Module Dimensions (without connectors)	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 (≥ 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.



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