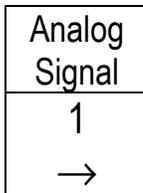


## ECT100-AS SINGLE CHANNEL FM UNIVERSAL ANALOG SIGNAL OPTICAL LINK



The ECT100-AS FM system provides high performance link for unidirectional transmission of various analog signals over a fiber optic cable. The ECT100-AS FM transmitter/receiver is fully compatible with ECT200-AS & ECT400-AS type systems allowing for mixed configurations when required. The ECT100-AS system utilizes linear frequency modulation and very low noise transmission technology to assure high quality and stability.

### FEATURES

- ❑ FM Transmitting Technology
- ❑ Wide Bandwidth Transmission from 10 Hz to 30 MHz
- ❑ Universal Balanced/Unbalanced Input for Transmitter
- ❑ Supports Transmission of Various Analog Signals such as: HDTV Tri-Level Sync, RF/IF, Timing, Telemetry Signals and more
- ❑ Multimode and Single Mode 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	-23 dBm	-25 dBm	-27 dBm
Optical Connectors	ST, SC		ST, SC, FC

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

\*\* measured with 62.5μ multimode 1m patch cord.

Signal Bandwidth @ 2dB	10 Hz - 20 MHz
Input Impedance (TX)	50, 75, 100 Ohm, Custom universal: balanced or unbalanced; up to 1 MOhm – unbalanced
Output Load Impedance (RX)	50, 75, 100 Ohm, Custom
Input/Output Signal Level*	0 to +/- 3 V @ 50 Ohm 0 to +/- 5 V @ 75, 100 Ohm
Signal Transfer Accuracy*	< 5% @ 10 Hz – 10 MHz <10% @ 10 MHz – 20 MHz
Signal-to-Noise Ratio*	64 dB
Input/Output Connector	BNC
Power Requirements:	
Transmitter Module	11 - 14 VDC @ 150mA, 21 - 27 VAC @ 100mA
Receiver Module	11 - 14 VDC @ 250mA,
Operating Temperature	0°C to +60°C (32°F to +140°F)
Dimensions:	
Transmitter Module	3.20"(81mm) x 3.72"(95mm) x 1.1"(28mm)
Receiver Module	4.17"(106mm) x 3.65"(93mm) x 1.1"(28mm)

\*measured with 100m for multimode and 1km for single mode optical cable;



## ORDERING INFORMATION

100E-AST/I-M1Z – transmitter module

100E-ASR/I-M1Z – 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 1310 nm,  $\geq 0$  dBm transmitter
- = S(15) for single mode 1550 nm transmitter
- = S(15)P for single mode 1550 nm,  $\geq 0$  dBm transmitter
- = S(W) for single mode CWDM / DFB transmitter
- = S(W)P for single mode CWDM / DFB,  $\geq 0$  dBm 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).

I = 50, 75, 100, Custom for input/output impedance

Z = FC, SC, ST for optical connectors

**Note:** The specifications are subject to change without notice.



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