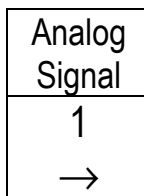


## ECT100-AS SINGLE CHANNEL FM UNIVERSAL ANALOG SIGNAL OPTICAL LINK



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.

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