

## ECT020

## TWO CHANNEL AUDIO FM OPTICAL LINK



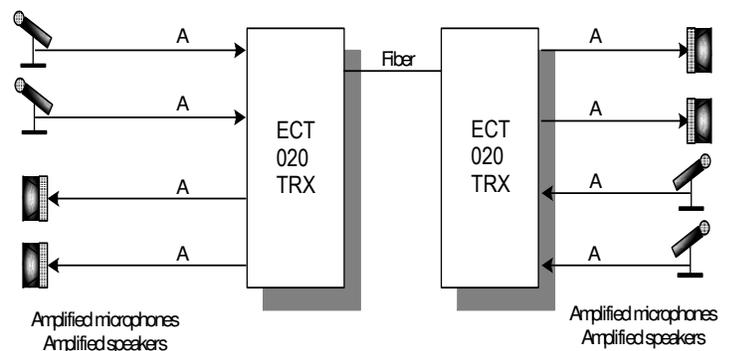
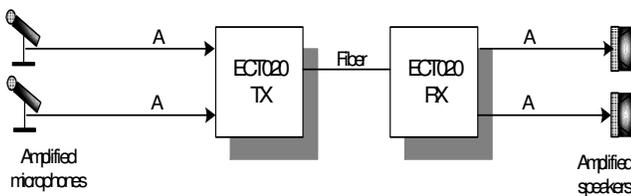
### FEATURES

- \* Frequency Modulation (FM) Quality
- \* Surface Mount Technology
- \* Screw Terminal Block Audio Connectors
- \* ST, FC, SC Optical Connector
- \* Up to 6.5 km/4 mi on 850nm Multimode;
- \* Up to 60 km/37 mi on 1310nm Single Mode;
- \* Up to 90 km/56 mi on 1550nm Single Mode;
- \* No User Adjustments
- \* Status Monitor LEDs
- \* Dry Contact Lost Link Alarm

### APPLICATIONS

- \* Intercom and Audio Broadcasting
- \* Security and Surveillance
- \* Campus Media Retrieval/Distance Learning
- \* Studio Applications

### LAYOUT DIAGRAM



## SPECIFICATIONS

### Audio Performance

<b>Audio Input Impedance</b>	600 Ohm or 10K, balanced or unbalanced
<b>Audio Input Level</b>	up to +8 dBm* or up to +18 dBm
<b>Audio Output Level</b>	up to +8 dBm @ 600 Ohm or 10K balanced or unbalanced up to +18dBm @ 10K, balanced
<b>Frequency Response @ 3dB</b>	20Hz to 20kHz
<b>Distortions</b>	< 1.5%**
<b>Signal to Noise Ratio</b>	> 68dB (weighted)**

\* with normal level 0 dBm;

\*\* measured with 1km/8-10μ SM and 100m/62.5μ MM cables

### General Parameters

<b>Operating Temperature</b>	- 20°C to +70°C
<b>Storage Temperature</b>	- 40°C to +85°C
<b>Operating Humidity</b>	0 to 95% non-condensing
<b>Dimensions</b>	156mm (6.15") L, 84mm (3.3") W, 62mm (2.42") H
<b>Power (optional)</b>	
option 1	6 - 7 VDC, 0.4 A
option 2	10 -15 VDC, 0.2 A
<b>Mean Time Between Failures (MTBF)</b>	>100,000Hrs.

### Optical Performance

Operating Wavelength	850nm	1310 and/or 1550nm
Transmitter Optical Source	VCSEL	Laser
Fiber Type	50/125 μ or 62.5/125 μ	8 – 10 μ
Transmitter Output Power (with +/- 1dBm variation)	-4 dBm	-6 dBm
Receiver Sensitivity (2 fiber)	-34 dBm	-35 dBm
Optical Loss Budget (2 fiber)	30 dB	29 dB
Receiver Sensitivity (1 fiber)	-28 dBm @ 850nm	-34 dBm
Optical Loss Budget (1 fiber)	24 dB @ 850nm	28 dB

## ORDERING INFORMATION

**020E-AT-M(P)1Z** – two channel audio transmitter module

**020E-AR-M(P)1Z** – two channel audio receiver module

**020E-AX-M(P)YZ** – two channel audio transceiver module

- E** = **M** for multimode receiver and 850 nm transmitter
- = **S** for single mode receiver and 1310nm transmitter
- = **S(15)** for single mode receiver and 1550nm transmitter
- = **SD, S(15)D** for DFB lasers option for transmitter
- P** = **12** for 10-15 VDC power option
- Y** = **1, 2** for number of fibers for transceiver
- Z** = **FC, ST, SC** for optical connector

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

