

## ECT022 DUAL CHANNEL BI-DIRECTIONAL FM AUDIO OPTICAL LINK



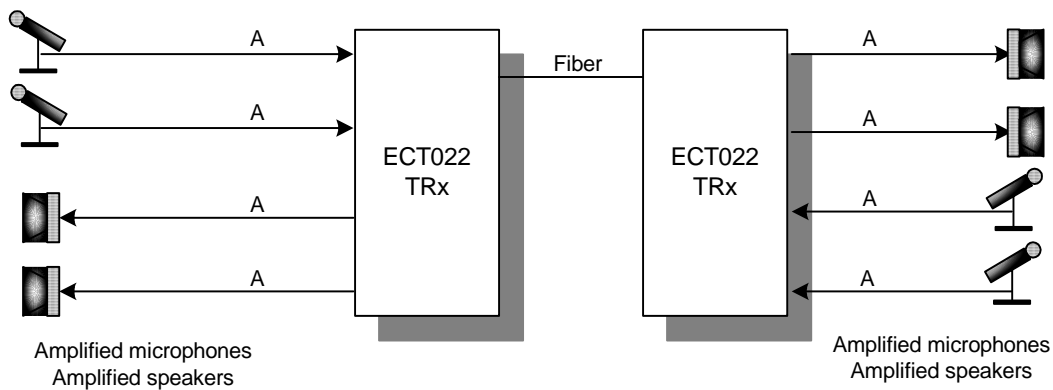
### FEATURES

- \* Frequency Modulation (FM) Quality
- \* Surface Mount Technology
- \* Screw Terminal Block (3 pos. Plug) Audio Connectors
- \* ST, FC, SC Optical Connector
- \* Two Channel Duplex Audio
- \* Up to 5 km/3mi on 850nm multimode;
- \* Up to 16 km/10mi on 1300nm multimode;
- \* Up to 50km/30mi on 1310nm singlemode;
- \* Up to 80km/50mi on 1550nm singlemode;
- \* No User Adjustments
- \* Status Monitor LEDs

### APPLICATIONS

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

### LAYOUT DIAGRAM



## SPECIFICATIONS

### Audio Performance

|                          |                                       |
|--------------------------|---------------------------------------|
| Audio Input Impedance    | 600 Ohm or 10K, balanced              |
| Audio In/Output Level    | 0dBm @ 600 Ohm or 10K<br>+18dBm @ 10K |
| Frequency Response @ 3dB | 20Hz to 20kHz                         |
| Distortions              | < 1.5%                                |
| Signal to Noise Ratio    | > 65dB (weighted)*                    |

\* measured with 1km, 62.5μ cable

### General Parameters

|                                   |  |
|-----------------------------------|--|
| Operating Temperature             | - 30°C to +70°C                                |
| Storage Temperature               | - 40°C to +85°C                                |
| Operating Humidity                | 0 to 95% non-condensing                        |
| Weight                            | 453g (1lb)                                     |
| Dimensions (module)               | 156mm (6.15") L, 84mm (3.3") W, 62mm (2.42") H |
| Power (optional)                  |  |
| option 1                          | 6 - 7 VDC, 0.4A                                |
| option 2                          | 10 -15 VDC, 0.3A                               |
| Mean Time Between Failures (MTBF) | >100,000Hrs.                                   |

|                                |                      |         |           |                    |
|--------------------------------|----------------------|---------|-----------|--------------------|
| Operating Wavelength           | 850nm                | 1300nm  |           | 1310 and/or 1550nm |
| Transmitter Optical Source     | Laser                | LED     |           | Laser              |
| Fiber Type                     | 50/125μ or 62.5/125μ | 50/125μ | 62.5/125μ | Singlemode         |
| Transmitter Output Power       | -5 dBm               | -17 dBm | -14 dBm   | -6 dBm             |
| Receiver Sensitivity (2 fiber) | -33 dBm              | -36 dBm |           | -36 dBm            |
| Optical Loss Budget (2 fiber)  | 28 dB                | 19 dB   | 22 dB     | 30 dB              |
| Receiver Sensitivity (1 fiber) | -31 dBm @ 850nm      |         |           | -34 dBm            |
| Optical Loss Budget (1 fiber)  | 26 dB @ 850nm        |         |           | 28 dB              |

## ORDERING INFORMATION

**022E-AX-M(P)YZ** – standalone module

**022E-AX-CYZ** – rack card\*

- E** = **M** for multimode
- = **M(13)** for multimode 1300nm only
- = **S** for single mode
- = **S(15)** for single mode 1550nm only
- P** = **12** for 10-15VDC power option (for module only)
- Y** = **1, 2** for number of fibers
- Z** = **FC** connector
- = **ST** connector
- = **SC** connector

\*Compatible with *USR series chassis*

