

ECT022 DUAL CHANNEL BI-DIRECTIONAL FM AUDIO OPTICAL LINK



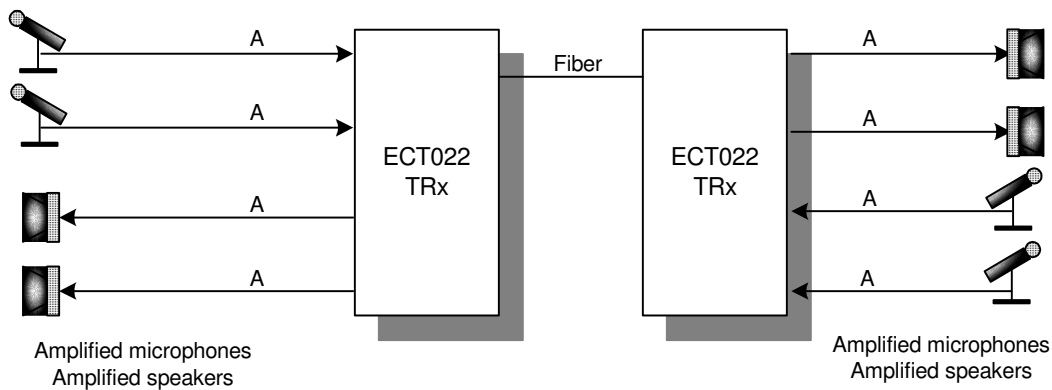
FEATURES

- * 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 6.5 km/4 mi on 850nm multimode;
- * Up to 18 km/11 mi on 1300nm multimode;
- * Up to 56 km/35 mi on 1310nm singlemode;
- * Up to 90 km/56 mi 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 or unbalanced |
| Audio Input Level | up to +8 dBm* or up to +18 dBm |
| Audio Output Level | up to +8 dBm @ 600 Ohm or 10K balanced or unbalanced |
| | up to +18dBm @ 10K, balanced |
| Frequency Response @ 3dB | 20Hz to 20kHz |
| Distortions | < 1.5%* |
| Signal to Noise Ratio | > 68dB (weighted)* |

* measured with 1km / 62.5μ cable and audio level 0 dBm @ 600 Ohm.

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, 0.4 A |
| option 2 | 10 -15 VDC, 0.2 A |
| 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 (with +/- 1 dBm variation) | -6 dBm | -17 dBm | -14 dBm | -6 dBm |
| Receiver Sensitivity (2 fiber) | -35 dBm | -37 dBm | | -37 dBm |
| Optical Loss Budget (2 fiber) | 29 dB | 20 dB | 23 dB | 31 dB |
| Receiver Sensitivity (1 fiber) | -34 dBm @ 850nm | | | -36 dBm |
| Optical Loss Budget (1 fiber) | 28 dB @ 850nm | | | 30 dB |

ORDERING INFORMATION

022E-AX-M(P)YZ – standalone module

022E-AX-CYZ – rack card*

- E** = **M** for multimode
- = **M(13)** for multimode 1300nm
- = **S** for single mode receiver or 1310nm transmitter
- = **SP** for high power (0 dBm) 1310nm transmitter option
- = **S(15)** for single mode 1550nm transmitter
- = **S(15)P** for high power (0 dBm) 1550nm transmitter option
- P** = **12** for 10-15VDC power option
- Y** = **1, 2** for number of fibers
- Z** = **FC** connector
- = **ST** connector
- = **SC** connector

*Compatible with USR series chassis

Note: The specifications are subject to change without notice.



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