# **ECT020(4)**

## **QUAD CHANNEL FM AUDIO OPTICAL LINK**





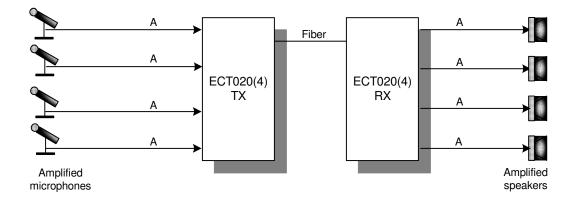
#### **FEATURES**

- \* Frequency Modulation (FM) Quality
- \* Surface Mount Technology
- \* Screw Terminal Block (3 pos. Plug) Audio Connectors
- \* ST, FC, SC Optical Connector
- \* 4 Channels Audio One-Way
- \* 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)\*

#### **General Parameters**

Operating Temperature  $-30^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ Storage Temperature  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ Operating Humidity 0 to 95% non-condensing

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.

#### **Optical Performance**

Operating Wavelength	850nm	1300nm		1310 and/or 1550nm
Transmitter Optical Source	VCSEL	LED		Laser
Fiber Type	50/125μ or 62.5/125μ	50/125μ	62.5/125μ	Singlemode
Transmitter Output Power (with +/- 1dBm 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

020E-AU4-M(P)YZ – standalone module 020E-AU4-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

**U** = **T** for transmitter, **R** for receiver

**P** = **12** for 10-15VDC power option (for module only)

Y = 1, 2 for number of fibers

**Z** = **FC**, **ST**, **SC** for optical connector

Note: The specifications are subject to change without notice.



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

<sup>\*</sup>Compatible with USR series chassis