



A2100 Series

Audio Repeater

FEATURES

- High Quality FM Audio
- Daisy Chain, Bus Configuration, "Party Line"
- Minimum 60 dB Signal-to-Noise
- 2 Fibers Multimode or Single Mode
- Ambient Operating Temperature -40° C to +74° C
- Distances to 30 Miles (49 km)
- Solid State limiters on all power lines provide automatic reset



SPECIFICATIONS

Audio: Balanced, simplex or full duplex

Bandwidth: 20 Hz - 20 kHz

Input/Output: 2.2 volts pk-pk

Impedance: 600 ohms

Signal-to-Noise 60 dB

Optical Power

62.5/125 Fiber: 25 μw (-16 dBm)

Receiver Sensitivity: 1 μw (-30 dBm)

Wavelength: 850 nm or 1300 nm

Maximum Distance 17 miles (28 km)

Operating Temp: -40° C to $+74^{\circ}$ C

Storage Temp: -40° C to +85° C

Relative Humidity: 0% to 95% (non-condensing)*

Power Requirement: 10-45 VDC

Connectors

Power/Audio: Terminal block with

screw terminals

Optical: S

Size (in.) (LxWxH)

Surface Mount: 7.0 x 4.9 x 2.0

*May be extended to humidity with condensation conditions by adding suffix "-C" to model number for conformal coating.

PLUG AND PLAY OPERATION

- No Electrical or Optical Adjustments
- Hot Swappable Rack Modules
- Distances up to 30 miles (49 km) without repeaters

SYSTEM FLEXIBILITY

- Simplex or Full Duplex
- 850 nm or 1300 nm
- Multimode or Single Mode

QUALITY DESIGN

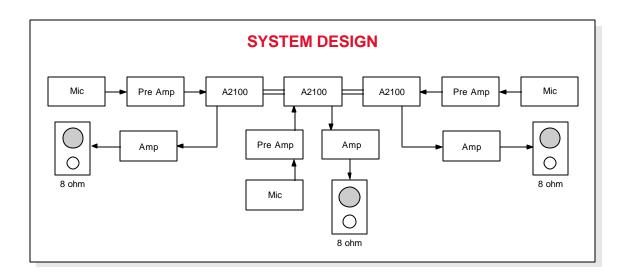
- Built to a High Fault Tolerence
- Mil-Grade Circuit Board
- Automatic Resettable Fuses
- 100,000 Hours MTBF
- Lifetime Warranty

OPTICAL POWER BUDGET

Fiber	Wavelength			Receiver		Optical	Maximum
		Model No.	Output Power	Model No.	Sensitivity	Power Budget	Distance
62.5/125	850 nm	A2100	20 uw - (-17 dBm)	A2100	0.5 uw (-33 dBm)	16 dB	2.8 miles (4.5 km)
	1300 nm	A2120		A2120			10 miles (16 km)
9/125	1300 1111	A2125	25 uw (-16 dBm)	A2125		17 dB	30 miles (49 km)

ENGINEERING SPECIFICATIONS

The fiber optic audio repeater shall be an IFS A2100 series. The unit shall provide audio drop and repeat transmission over standard 62.5/125 multimode or 9/125 single mode fiber optic cable. It shall provide for transmission distances of up to 30 miles (49 km) without requiring manual adjustments or line attenuators. All printed circuit boards shall be manufactured from Mil-Grade specification circuit board material. The housing shall be all metal construction with all connections identified with silk screened labels. The unit shall be available in surface mount version. The units shall have solid state limiters on all power lines which shall provide for automatic reset.



MADE IN THE USA

Regulatory Agencies / Approvals: **ORDERING INFORMATION** Audio Repeater, 850 nm, 2 multimode fibers

A2120 Audio Repeater, 1300 nm, 2 multimode fibers

A2125 Audio Repeater, 1300 nm, 2 single mode fibers

PS-12 DC 12 VDC power supply (included)

A2100







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