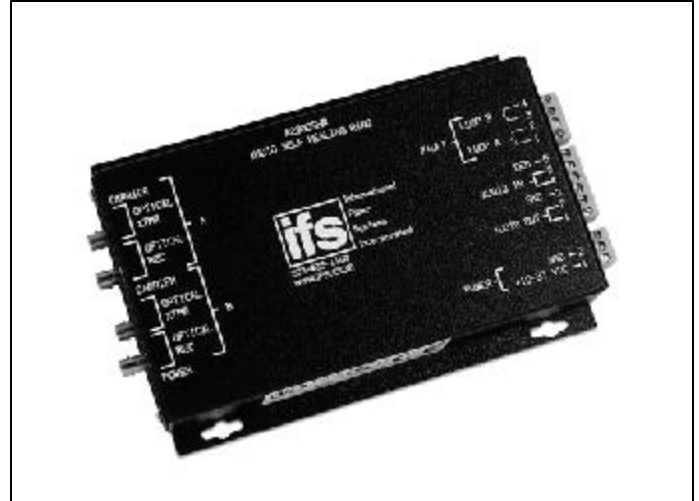




## FEATURES

- Emergency Broadcast
- Allows configuration of fault tolerant emergency audio (tolerates cable break)
- Master broadcast
- Supervision of communication paths
- Contact outputs for path failure
- Distances to 30 miles (49 km)
- Ambient Operating Temperature -40° C to +74° C
- Mil-Grade Circuit Board Material
- Solid State limiters on all power lines provide automatic reset



## SPECIFICATIONS

<b>Audio:</b>	Balanced, simplex
<b>Bandwidth:</b>	20 Hz - 20 kHz
<b>Input/Output:</b>	2.2 volts pk-pk
<b>Impedance:</b>	600 ohms
<b>Signal-to-Noise</b>	60 dB
<b>Receiver Sensitivity:</b>	1 $\mu$ w (-30 dBm)
<b>Wavelength:</b>	850 nm or 1300 nm
<b>Maximum Distance</b>	30 miles (49 km)
<b>Operating Temp:</b>	-40° C to +74° C
<b>Storage Temp:</b>	-40° C to +85° C
<b>Relative Humidity:</b>	0% to 95% (non-condensing)*
<b>Power Requirement:</b>	10-45 VDC
<b>Connectors</b>	
Power/Audio:	Terminal block with screw terminals
Optical:	ST
<b>Size (in.) (LxWxH)</b>	
Surface Mount:	7.0 x 4.9 x 1.0

\*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
- Dynamically supports data rates up to 64 Kbps
- Transparent to data encoding
- Distances up to 30 miles (49 km) without repeaters

## SYSTEM FLEXIBILITY

- 850 or 1300 nm
- Multimode or Single Mode
- Surface or Rack Mount

## QUALITY DESIGN

- Built to a High Fault Tolerance
- Mil-Grade Circuit Board
- U.L. Listed to the Board Level
- Automatic Resettable Fuses
- 100,000 Hours MTBF
- Lifetime Warranty

## APPLICATIONS

- Fire Alarm Systems

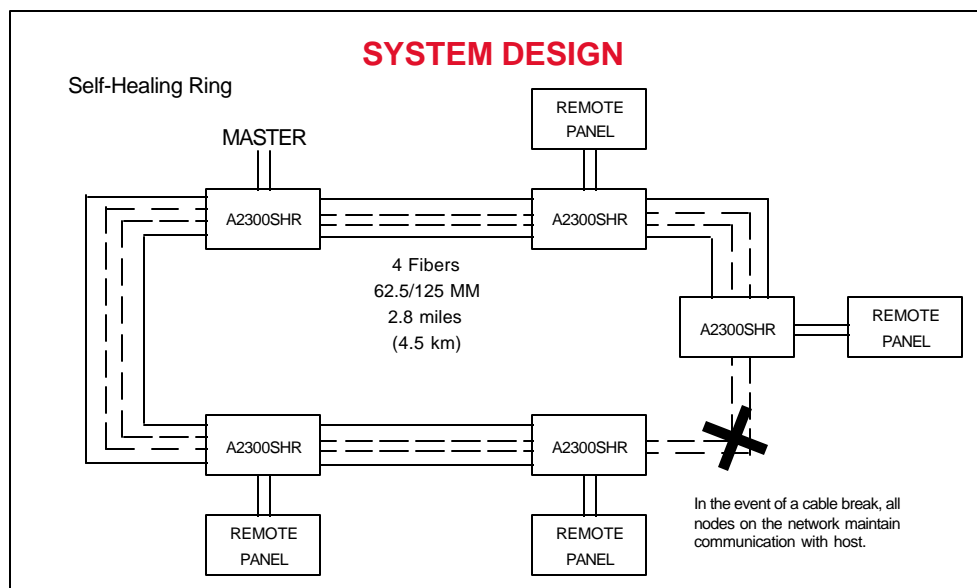
## OPTICAL POWER BUDGET

Fiber	Wavelength	Transmitter		Receiver		Optical Power Budget	Maximum Distance
		Model No.	Output Power	Model No.	Sensitivity		
62.5/125	850 nm	A2300SHR	20 uw (-17 dBm)	A2300SHR	0.5 uw (-33 dBm)	16 dB	2.8 miles (4.5 km)
	1300 nm	A2320SHR		A2320SHR			10 miles (16 km)
9/125	1300 nm	A2325SHR	25 uw (-16 dBm)	A2325SHR		17 dB	30 miles (49 km)

## ENGINEERING SPECIFICATIONS

The fiber optic emergency broadcast audio repeater shall be an IFS A2300SHR series. The unit shall provide audio master to remote drop and repeat audio transmission in a self-healing ring configuration over standard 62.5/125 multimode fiber optic cable. The self-healing ring shall provide redundant audio paths via counter-rotating ring fiber optic paths, such that upon failure of a segment of fiber, all nodes on the ring shall still receive audio signal from the master. 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 both rack mount and surface mount versions. The units shall have solid state limiters on all power lines which shall provide for automatic reset. The rack mount configurations shall have an internal D.C. power supply and a short circuit in one unit shall not affect operation of other units powered from the common power supply. The rack mount units shall be hot swappable with no risk of damage to other units during replacement. The unit shall be U.L. Listed.

## SYSTEM DESIGN



MADE IN THE USA

## ORDERING INFORMATION

<b>A2300SHR</b>	Audio Self-Healing Ring, 850 nm, multimode
<b>A2320SHR</b>	Audio Self-Healing Ring, 1300 nm, multimode
<b>A2325SHR</b>	Audio Self-Healing Ring, 1300 nm, single mode
<b>PS-12 DC</b>	12 VDC power supply (included)

Regulatory Agencies / Approvals:



Contract #  
GS-03F-5043C

LISTED



I.T.E.  
6D16



**International Fiber Systems, Inc.**

International Headquarters

16 Commerce Road • Newtown, CT 06470

Sales: (203) 426-1180 • Fax: (203) 426-3326

Email: sales@ifs.com • www.ifs.com