

IAR-050 INDOOR ACTIVE REPEATER



- **Broadband Repeater with 80 Channel Capability**
- **Can feed a 20 Mile path or two 15 Mile paths simultaneously**
- **Requires only 7 inches of Indoor Rack Space**
- **Digital Ready**

PRODUCT APPLICATION:

The IAR-050 is a solid state, broadband, on-frequency repeater designed to extend the range of cable systems by amplifying an incoming signal and re-transmitting it in one or more directions.

The repeater is used to bypass line-of-sight obstacles between transmitter and receiver locations.

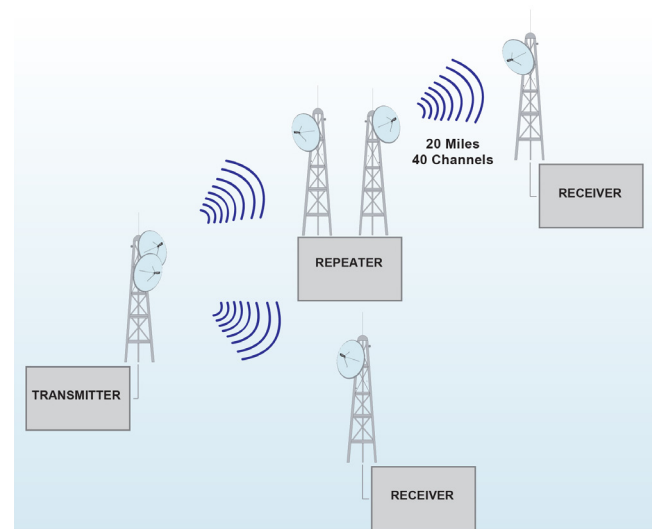
With a capacity of up to 80 channels, the IAR-050 can extend the range of a system in one direction or feed several receivers simultaneously. Typical range extension for 40 channel loading is 20 miles (32 Kilometers). Alternatively, the repeater can feed two simultaneous paths of 15 miles (24 km) each.

The repeater can operate alone or, if redundancy is critical, paired with another repeater. In this case it can be equipped with manual (remotely controllable) or automatic redundancy switching.

The IAR-050 is rack mounted for convenience and ease of access to components.

Output signal monitoring and operating diagnostic measurements are easily performed manually on site or remotely without interrupting operation.

Automatic Gain Control (AGC) circuits make it possible to optimize the fade margin/output power trade off.



Repeater													
Output Frequency ² :	12.7 to 13.25 GHz												
Noise Figure ³ :	5.5 dB												
Output Level for 65 dB C/CTB:	<table border="1"> <thead> <tr> <th>Channels</th> <th>dBm/Channel</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>14.0</td> </tr> <tr> <td>21</td> <td>11.5</td> </tr> <tr> <td>35</td> <td>9.0</td> </tr> <tr> <td>60</td> <td>6.5</td> </tr> <tr> <td>80</td> <td>5.0</td> </tr> </tbody> </table>	Channels	dBm/Channel	12	14.0	21	11.5	35	9.0	60	6.5	80	5.0
	Channels	dBm/Channel											
	12	14.0											
	21	11.5											
	35	9.0											
	60	6.5											
80	5.0												
Normal Gain:	51 dB												
Gain Flatness:	±1 db												
Total ACG Range:	30 dB												
Input Connector:	WR-75 Waveguide												
Output Connector:	WR-75 Waveguide												
Temperature Range:	60° to 100°F (16° to 38°C)												
Humidity:	95% max.												
Primary Power:	120/240 VAC, 50/60Hz (per customer specification)												
Power Consumption:	250 VA RMS												
Mounting:	19" EIA Standard Relay Rack												
Weight:	65 lb. (29.5 kg)												
Dimensions:	19" rack width x 7" H x 20" D (48.26cm W x 17.7cm H x 55.88 cm D)												

¹ Specifications subject to change without prior notice.

² For Group C. Other frequencies available.

³ Not including loss of AGC attenuator