

ITX-050 INDOOR BROADBAND TRANSMITTER



- **High Power Broadband Transmitter with 80 Channel Capability**
- **Can Feed One Link of 25 Miles or Four Links of 8 Miles each with 40 Channel Loading**
- **Requires only 7 inches of Indoor Rack Space**
- **Local or Remote Diagnostics**
- **Digital Ready**

PRODUCT APPLICATION:

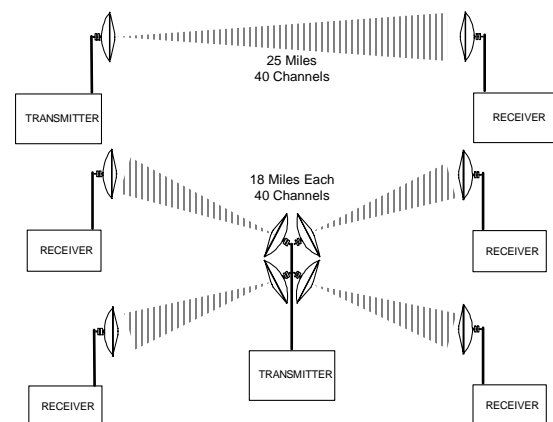
The ITX-050 is a solid state broadband transmitter designed to implement high quality, cost-effective microwave links for transporting up to 80 television channels.

This transmitter can be used to feed a single link or several links simultaneously. A typical application example would be a single 25-mile (40 km) link with 40 channel loading, or 4 simultaneous links of 18 miles (29 km) each.

This transmitter can be used alone or in pairs to replace older channelized units. The ITX-050 is rack mounted for convenience and ease of access to components. It incorporates the latest Gallium Arsenide power amplifier technology to deliver a clean, reliable signal.

Output signal monitoring and diagnostic measurements are available locally or remotely via Internet.

Designed for many years of trouble-free operation, the ITX-050 can be upgraded to higher power units of the ITX family of transmitters.



ITX-050

Transmitter																			
Input Frequency ² :	54 to 550 MHz																		
Nominal Input Level for 12 TV:	+18 dBmV (-31 dBm per channel)																		
Output Frequency ² :	12.7 to 13.25 GHz																		
Output Level for 65 dB C/CTB:	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #e6f2ff;"> <th style="padding: 5px;">Channels</th> <th style="padding: 5px;">dBm/Channel</th> <th style="padding: 5px;">C/N (dB)</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">12</td> <td style="padding: 5px;">14.0</td> <td style="padding: 5px;">67.0</td> </tr> <tr> <td style="padding: 5px;">21</td> <td style="padding: 5px;">11.5</td> <td style="padding: 5px;">64.5</td> </tr> <tr> <td style="padding: 5px;">35</td> <td style="padding: 5px;">9.0</td> <td style="padding: 5px;">62.0</td> </tr> <tr> <td style="padding: 5px;">60</td> <td style="padding: 5px;">6.5</td> <td style="padding: 5px;">59.5</td> </tr> <tr> <td style="padding: 5px;">80</td> <td style="padding: 5px;">5.0</td> <td style="padding: 5px;">58.0</td> </tr> </tbody> </table>	Channels	dBm/Channel	C/N (dB)	12	14.0	67.0	21	11.5	64.5	35	9.0	62.0	60	6.5	59.5	80	5.0	58.0
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80	5.0	58.0																	
Normal Gain ³ :	36 dB																		
Frequency Response:	±1 dB																		
Frequency Stability:	0.0005%																		
Input Return Loss:	15 dB																		
Input Connector:	Type "F"																		
Output Return Loss:	18 dB																		
RF Output Connector:	WR-75 Waveguide																		
Temperature Range:	60° to 100°F (16° to 32°C)																		
Humidity	95% max.																		
Primary Power:	120 VAC, 50/60Hz																		
Power Consumption:	300 VA RMS																		
Mounting:	19" EIA Standard Relay Rack																		
Weight:	34.25 lb. (15.5 kg)																		
Dimensions:	19" W x 7" H x 20" D (48.26cm W x 17.78cm H x 50.88cm D)																		

¹ Specifications subject to change without prior notice.

² For Group C. Other frequencies available.

³ Gain may be varied with 10dB attenuator.