

ITX-100D INDOOR BROADBAND TRANSMITTER

- **Broadband Transmitter with 80 Channel Capability**
- **Can Feed Two Links of 25 Miles or Eight Links of 20 Miles each with 80-Channel Loading**
- **Requires only 40 inches of Indoor Rack Space**
- **Solid State Replacement for Channelized Transmitters**
- **Fully Redundant with Automatic or Manual Switching and Local and/or Remote Control**
- **Optional Remote Diagnostics (PC Compatible)**
- **Digital Ready**



PRODUCT APPLICATION:

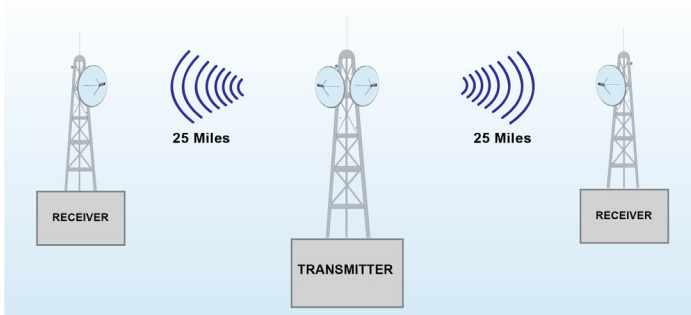
The ITX-100D is a fully redundant solid state broadband transmitter designed to implement high quality, high power microwave links for transporting up to 80 television channels.

This transmitter can be used to feed two or more links. A typical application example would be two simultaneous links of 25 miles (40 km) each with 80 channel loading.

The ITX-100D is made up of two ITX-100 transmitter units and a redundancy controller, all rack mounted for convenience and ease of access to components.

The ITX-100D incorporates the latest Gallium Arsenide power amplifier technology to deliver a clean, reliable signal.

Output signal monitoring as well as operation diagnostic measurements are easily performed without interrupting operation.



Product Specification¹



Transmitter																			
Input Frequency ² :	54 to 550 MHz																		
Nominal Input Level for 12 TV:	+21 dBmV (-28 dBm per channel)																		
Output Frequency ² :	12.7 to 13.25 GHz																		
Output Level for 65 dB C/CTB:	<table border="1"> <thead> <tr> <th>Channels</th> <th>dBm/Channel</th> <th>C/N (dB)</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>16.5</td> <td>67.0</td> </tr> <tr> <td>21</td> <td>14.0</td> <td>64.5</td> </tr> <tr> <td>35</td> <td>11.5</td> <td>62.0</td> </tr> <tr> <td>60</td> <td>9.0</td> <td>59.5</td> </tr> <tr> <td>80</td> <td>7.5</td> <td>58.0</td> </tr> </tbody> </table>	Channels	dBm/Channel	C/N (dB)	12	16.5	67.0	21	14.0	64.5	35	11.5	62.0	60	9.0	59.5	80	7.5	58.0
Channels	dBm/Channel	C/N (dB)																	
12	16.5	67.0																	
21	14.0	64.5																	
35	11.5	62.0																	
60	9.0	59.5																	
80	7.5	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:	120/240 VAC, 50/60Hz (per customer specification)																		
Power Consumption:	375 VA RMS																		
Mounting:	19" EIA Standard Relay Rack																		
Weight:	60 lb. (27.2 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.