

ITX-005+D INDOOR BROADBAND TRANSMITTER

- **Broadband Transmitter with 80 Channel Capability**
- **Can Feed Two links at 14 Miles each or Four Links at 12 Miles each with 40 Channel Loading**
- **Upgradable, Modular Design**
- **Requires only 31.5 inches of Indoor Rack Space**
- **Fully Redundant with Automatic or Manual switching and Local and/or Remote Control**
- **Optional remote diagnostics (PC compatible)**
- **Digital Ready**



PRODUCT APPLICATION:

The ITX-005+D is a fully redundant solid state broadband transmitter designed to implement high quality, cost-effective microwave links for transporting up to 80 television channels.

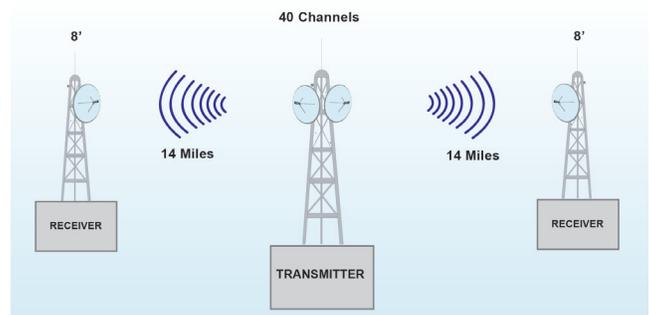
This transmitter can be used to feed two or more links simultaneously. A typical application example would be two simultaneous links of 14 miles (25 km) each, or four simultaneous links of 12 miles (19 km) each, (calculated at 40 channel loading).

The ITX-005+D is made up of two ITX-005+ transmitter units and a redundancy controller, all rack mounted for convenience and ease of access to components.

The ITX-005+D 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.

Designed for many years of trouble-free operation, the ITX-005+D can be field upgraded to higher power units of the ITX "D" family.



Product Specification¹



| Transmitter | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|-------------|----------|----------|-------------|----------|----|-----|------|----|-----|------|----|-----|------|----|------|------|----|------|------|
| Input Frequency ² : | 54 to 550 MHz | | | | | | | | | | | | | | | | | | | | |
| Nominal Input Level for 12 TV: | +10 dBmV (-39 dBm) | | | | | | | | | | | | | | | | | | | | |
| 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>5.5</td> <td>66.0</td> </tr> <tr> <td>21</td> <td>3.0</td> <td>63.5</td> </tr> <tr> <td>35</td> <td>0.5</td> <td>61.0</td> </tr> <tr> <td>60</td> <td>-2.0</td> <td>58.5</td> </tr> <tr> <td>80</td> <td>-3.5</td> <td>57.0</td> </tr> </tbody> </table> | | | Channels | dBm/Channel | C/N (dB) | 12 | 5.5 | 66.0 | 21 | 3.0 | 63.5 | 35 | 0.5 | 61.0 | 60 | -2.0 | 58.5 | 80 | -3.5 | 57.0 |
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| 80 | -3.5 | 57.0 | | | | | | | | | | | | | | | | | | | |
| Normal Gain ³ : | 38 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: | 550 VA RMS | | | | | | | | | | | | | | | | | | | | |
| Mounting: | 19" EIA Standard Relay Rack | | | | | | | | | | | | | | | | | | | | |
| Weight: | 78.0 lb. (35.5 kg) | | | | | | | | | | | | | | | | | | | | |
| Dimensions: | 3 @ 19" rack width x 7" H x 20" D 3 @ (48.26cm rack width 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.