

## OTX18-001 OUTDOOR BROADBAND TRANSMITTER

- **Broadband Transmitter with 72 Channel Capability**
- **Can Feed Four Receiver at 1.5 Miles Each**
- **Modular Design**
- **Feeds Booster Amplifier**



### PRODUCT APPLICATION:

The OTX18-001 Transmitter is an outdoor solid-state, broadband transmitter designed to implement high quality, cost-effective microwave links for transporting up to 72 television channels.

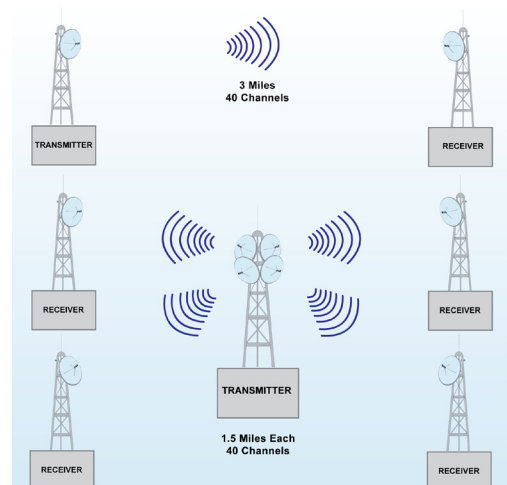
This transmitter can be used to feed a single link, or several links simultaneously. A typical application example would be a single 3 mile (5 kilometer) link with 40 channel loading, or four simultaneous links of 1.5 miles (2.5 kilometers) each.

The OTX18-001 can feed several receivers and one local booster amplifier simultaneously. The capability to drive a booster amplifier with a high quality signal makes it possible to significantly increase the effective range of the transmitter and/or the number of receivers fed from the transmitter site.

The OTX18-001 features operating diagnostics such as output signal level monitoring, phase-lock status and power supply voltages. Remote diagnostics monitoring is offered as an option.

The transmitter incorporates an Automatic Gain Control (AGC) circuit for gain control over its operating temperature range, and a State-of-the-Art low-noise crystal controlled reference oscillator and solid state GaAs power amplifier for best reliability and performance.

Designed for many years of trouble-free operation in an outdoor environment, the OTX18-001 can be easily upgraded to the higher power units of the OTX18 family of transmitters.



# Product Specification<sup>1</sup>

# CABLE AML

<b>Transmitter</b>																			
Input Frequency <sup>2</sup> :	54 to 550 MHz																		
Nominal Input Level for 12 TV:	24 dBmV																		
Output Frequency <sup>2</sup> :	17.7 to 18.3 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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Normal Gain <sup>3</sup> :	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-42 Waveguide																		
Temperature Range:	-40° to 120°F (-40° to 49°C)																		
Humidity:	100% max.																		
Primary Power:	60/120/240 VAC, 50/60Hz or 12/24 VDC (per customer specification)																		
Power Consumption:	100 VA RMS																		
Mounting:	Antenna Pole Mount																		
Weight:	50 lb. (22.7 kg)																		
Dimensions:	16" W x 13" H x 7" D (40.6cm W x 33cm H x 17.8cm D)																		

<sup>1</sup> Specifications subject to change without prior notice.

<sup>2</sup> Other frequencies available.

<sup>3</sup> Gain may be varied with 10dB attenuator.