

## DEM L24TX and L24TXMM Transmit Converter

### Description:

The L24TX is a 25 watt 1260-1270 MHz transmit converter designed specifically for Amateur Satellite operation. It utilizes circuitry that enables the use of selectable IF frequency ranges and drive levels to compliment any existing satellite system or to start a new set-up. Depending on the IF drive source, a specific user selectable frequency range may be selected or the complete band of operation may be utilized if your Transceiver has the 10 MHz of range. Frequency accuracy and range is established by the use of an on board synthesizer locked to a standard 10 MHz source. The required 10 MHz source frequency may be derived from a GPS locked system, an external TCXO provided by the user, or the external source option may be ordered to provide the frequency accuracy required. External connections are provided for frequency selection.



The L24TX has provisions to operate with various drive levels between -20 dBm and 10 watts by selecting the desire drive range and may be changed at any time by the user with a simple adjustment or circuit modification. Output power monitoring is provided by a reference voltage through an auxiliary connection.

Options include the L24TXMM which is a mast mounted option. It is provided without the Heat sink and fan along with provisions for monitoring all necessary functions. Options are available for single coax use that shares the 10 MHz and IF frequency signals.



The L24TX is shipped with an assembled DC power/control cable included and will be configured with any of the options listed below. The standard connector is provided with the L24TXMM. Please review the specifications and options but understand that some "custom" options and configurations may be enabled to satisfy your requirements, Just ask!



<b>RF Frequency Range</b>	1260 -1270 MHz. This depends on the IF frequency range of the utilized transceiver.
<b>IF Frequency range:</b>	28-38 MHz, 50-54 MHz, 430-440 MHz.
<b>Power Output :</b>	25 Watts linear minimum, 30W + Saturated may be obtainable
<b>Input Drive Level :</b>	-20dBm to 10 Watts options
<b>DC Power Requirement:</b>	13.8 VDC @ 7 Amps.
<b>Connectors:</b>	<b>N Female</b> - RF output <b>BNC Female</b> - IF input and 10 MHz input
<b>Options:</b>	Mast Mount, 10 MHz source, Shared Coax, Frequency Select
<b>Standard Dimensions:</b>	6.3" W x 5.3" L x 3.2" H with connectors and Fan
<b>Mast Mount Version:</b>	6.0" W x 5.3" L x 0.9" H with connectors

### Standard Features Included:

**RF Power Monitor:** A standard reference voltage output is provided to monitor the output power of the amplifier. It is user calibrated and can be connected to any LED display circuit or voltmeter. It may also be utilized to verify the linear function of the amplifier when in actual use.

**Variable Speed Cooling Fan:** A variable speed cooling fan is controlled by the actual heat sink temperature. Not available with Mast mount option.

**Transmit Indication LED:** For Visual use only

### Optional Features List:

**Frequency Select:** Standard with 28 and 50 MHz IF frequency range

**10 MHz Source:** External unit supplied at an additional cost.

**Common Coax connection:** Combines IF and 10 MHz source signal for mast or remote mounting and supplied at an additional cost.

**IF Drive Range:** -20 to +0dBm, 0 to 10 mw, 100 mw Max, 1 watt max, 10 watt max

**Mast Mount or Remote Operation:** Provided without heat sink and Fan. All external monitoring options installed.