



## DESCRIPTION

The R.L. Drake model TUM714 is a "T" channel block up-converter packaged in a one unit wide mini-rack package. This unit is compatible with the Drake 12 position and 4 position rack mounting frames for use in a 19" wide rack. There are twelve one unit wide slots, in addition to space for the power supply (in the 12 position rack unit).

The up-converter accepts inputs in the "T" channel range of 5 through 54 MHz and up-converts an input signal to an output that is 168.25 MHz higher in frequency than the input. Thus, "T" channels T7 through T14 are converted to outputs at standard EIA CATV channels 7 through 13 and channel 23.

Typically, the TUM714 will be used in conjunction with a demodulator to derive NTSC video and audio from a "T" channel signal. The maximum input signal level that can be accepted by the TUM714 without significant distortion is +30 dBmV. The TUM714 has approximately unity gain. The unit may also be used to translate digital QPSK, QAM, or USB signals as well as analog NTSC signals.

## SPECIFICATIONS

Input Frequency Range:	5 MHz to 54 MHz.
Input Impedance:	75 Ohms, return loss >14 dB.
Output Frequency Range:	173 MHz to 223 MHz.
Output Impedance:	75 Ohms, return loss >14 dB.
Gain:	0 dB, $\pm 2$ dB.
Noise Figure:	<10 dB.
L.O. Frequency:	168.25 MHz, $\pm 2$ kHz.
Input Level:	+30 dBmV maximum for -60 dB harmonics and intermods.
Third Order Input Intercept Point:	>+60 dBmV.
Power Requirement (from PSM121):	+12 V @ 75 mA. +5 V @ 10 mA.
Operating Temperature Range:	0° to +50° C, ambient.
Size:	1" W x 3.5" H x 8.75" D. (2.5 cm) W x (8.9 cm) H x (22.2 cm) D.
Weight	10.2 oz. (0.3 Kg).



Specifications subject to change without notice or obligation.