



## DUC864

### Digital Signal Upconverter (54-860 MHz)

The DUC864 upconverter is designed specifically to upconvert a 44 MHz IF signal, modulated by a digital signal utilizing either 8-VSB or QAM modulation, without degradation to the digital transport stream that is ultimately recovered. The DUC864 can supply an output on any channel between 54 and 860 MHz. CATV or broadcast channel plans may be selected by a front panel switch. The DUC864 is packaged in an extruded aluminum case to be utilized with other Drake Digital component series products.



**DUC864 Digital  
Signal Upconverter**

#### Specifications

<b>IF Input</b>	
Frequency:	44 MHz
Input Level:	+30 dBmV, $\pm 2$ dB
Input Impedance:	75 Ohms, return loss > 20dB
<b>RF Output</b>	
Frequency Range:	54-860 MHz, Standard Cable TV Channels 2-135, Broadcast TV Channels 2-69
Output Level:	+45 dBmV, 15 dB adjustment range
Broadband Noise:	-73 dBc (6 MHz bandwidth) @ +45 dBmV output level
In Channel C/N:	63 dB (6 MHz bandwidth) @ +45 dBmV output level
Spurious Outputs (5 MHz to 900 MHz):	-60 dBc @ +45 dBmV output level
Impedance:	75 Ohms, return loss > 10dB, typical
Amplitude Flatness Over 6 MHz Channel:	$\pm 0.4$ dB maximum
SSB Phase Noise:	-95 dBc @ 10 KHz Offset, -70 dBc @ 1 KHz Offset
Frequency Stability:	$\pm 5$ PPM
MER:	30 dB minimum (unequalized) 38 dB minimum (with blind equalizer)
<b>General</b>	
DC Power Input:	+12 V $\pm 5\%$ at 300 ma +5 V $\pm 5\%$ at 350 ma
Operating Temperature:	0°C to +50°C, ambient
Size:	1" W x 3.5" H x 9.25" D (2.5 cm W x 8.9 cm H x 23.5 cm D)
Weight:	14.5 oz. (0.41 Kg.)