



The R.L. Drake DUC864 is a low noise upconverter used to translate the 44 MHz digital IF signal from a QAM or VSB modulator, DDC downconverter, or other similar equipment to the desired CATV or off-air output channel. A single model covers the entire 54 to 860 MHz output range. The DUC864 features low phase noise and can be used for QAM modulation up to 256 QAM. This module can be rack mounted using the DRMM4 or DRMM12 rack mount. The PS8 power supply module is required with the DRMM12.

SPECIFICATIONS

IF INPUT

Frequency: 44 MHz.
 Input Level: +30 dBmV, ± 2 dB.
 Input Impedance: 75 Ohms, return loss >20 dB.

OUTPUT

Frequency Range: 54 to 864 MHz;
 CATV channels 02 through 135,
 Broadcast TV channels 02 through 69.
 Output level: +45 dBmV minimum, 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.
 Output Impedance: 75 Ohms, return loss >10 dB typical.
 Amplitude Flatness Over
 6 MHz Channel: ± 0.4 dB maximum.
 SSB Phase Noise: -95 dBc @ 10 kHz offset, -70 dBc @ 1 kHz offset.
 Frequency Stability: ± 5 ppm.
 MER: 30 dB minimum (unequalized),
 38 dB minimum (with blind equalizer).

GENERAL +12 V $\pm 5\%$ at 300 mA.

DC Power Input: +5 V $\pm 5\%$ at 350.

Operation Temperature: 0°C to +50°C, ambient.
 Size: 1" W x 3.5" H x 9.25" D
 Weight: 14.5 oz.



DUC864 Digital Signal Upconverter