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## LCM-870x3

### THREE 870MHz AGILE MODULATORS IN SINGLE RACK SPACE

#### Features / Benefits

- Cost effective
- Space saving 3 in 1 chassis design
- Multiple formats for frequency or channel assignments
- Each modulator features agility from 48.25MHz to 871.25MHz
- High level +55dBmV minimum output
- >76dB out-of-band C/N ratio
- >60dBc spurious free dynamic range
- IF loop
- BTSC stereo compatible
- Available in PAL standards
- Low power consumption for long term performance



The model **LCM-870x3** packages three high quality 870MHz frequency agile modulators into a single 1.75”H x 19”W rack mount chassis. Each modulator provides high level +55dBmV outputs on any NTSC channel from channel 2 (55.25MHz) to channel 136 (865.25MHz). When ordered in PAL standards, the LCM-870x3 provides output carriers from 48.25MHz to 863.25MHz. Channel or frequency assignments are selected by front panel rotary switches in 0.25MHz increments.

The upconverter phase noise is – 84dBc/Hz minimum at 10KHz offset. This performance allows the upconverter portion of the **LCM-870x3** to be used for a Qam carrier frequency converter, Low power consumption for reliable, long term performance is another quality feature of the **LCM-870x3** Series.

Quality / Engineering / Innovation

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# LCM-870x3



## SPECIFICATIONS

(Each Modulator)

Frequency range.....	48.25MHz through 865.25MHz. Selectable in 0.25MHz increments
Output level.....	+55dBmV minimum
Frequency stability.....	<± 5KHz of selected channel frequency
Out-of-band C/N ratio.....	>76dB as measured in a 4.0MHz bandwidth
Phase noise.....	>84dBc/Hz @ 10KHz offset minimum
Spurious outputs.....	>55dBc minimum, 60dBc typical
Video carrier level.....	Adjustable downward by 10dB minimum
Video performance.....	1V p-p video input @ 85% modulation Differential Gain <3% typical, 5% maximum Differential Phase <2° typical, 5° minimum
Video baseband input level.....	0.5 TO 1.5 volts p-p
Audio baseband input level.....	300mV to 1.4V p-p, 600W balanced
Audio / Video ratio.....	Adjustable 12dB to 20dB below video carrier
BTSC stereo / mono.....	Internal defeat of audio pre-emphasis for BTSC baseband inputs
IF loop output.....	+38dBmV @ 45.75MHz
Front panel controls.....	Channel / Frequency select Rotary Switches RF level adjust Audio / Video ratio adjust Audio / Video modulation adjust with LED's RF Lock /Unlock LED's RF test "F" connector Power On /Off LED
Rear panel connectors.....	Video in / RF out "F" connectors IF in / IF out "F" connectors Audio screw terminal connectors
Power consumption.....	24 watts , ( <8 Watts per modulator )