



# M860

## 806MHz Channelized-Agile CATV A/V Modulator



- 125-Channel Range 54-806 MHz (CATV 2-125)
- 60 dBmV minimum adjustable output for optimum carrier-to-noise performance
- Composite audio-video IF loop provides compatibility with encoders, ghost cancellers, and video override applications
- BTSC stereo compatible provides pass-through for stereo signals
- State-of-the-art microprocessor control digital phase-locked loop (PLL) design guarantees precise frequency locking for solid drift-free operation
- SAW filtered for superior adjacent channel performance enables drop-in channel expansion
- Front panel controls and test point enables easy setup and monitoring
- Digital display provides quick channel identification
- In-band carrier-to-noise ratio >60dB ensures superior picture quality
- IRC and HRC offset available for frequency settings in systems using offset channels
- Lab retunable within band via front panel channel selection and minimum output filter retuning

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The Pico Macom M860 is a professional re-broadcast grade microprocessor controlled phase-locked loop synthesized single channel audio-video modulator. The M860 provides 60dBmV minimum output from CATV channels 2 to 125 (54-806 MHz) while accommodating HRC and IRC offset frequencies. The M860 features a composite audio-video IF loop, which provides compatibility with encoders, ghost cancellers, and video-override applications. The unit is lab retunable within band via front panel channel selection and minimum output filter retuning. The M860 is equipped with a pre-emphasis disable switch which enables pass-through of high-fidelity BTSC stereo signals where available. This cost-effective modulator was designed for use in heavily loaded systems requiring high stability and superior picture and stereo sound quality. Its phase locked loop frequency control, and superior SAW filtering enhances stability, minimizes adjacent channel interference and assures accurate and spurious free output. Superior out-of-band carrier-to-noise performance is achieved through band-pass filtering at the output amplifier. The modulator is shipped with all internal adjustments preset. FCC Docket 21006 offsets are standard. Pico Macom backs up this product with its industry leading 5-year limited warranty.

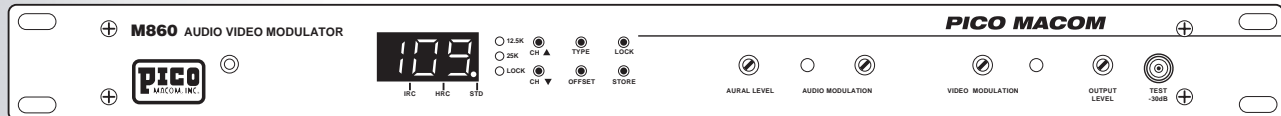
Order From:



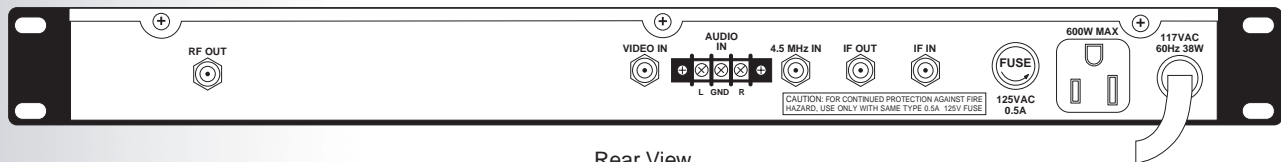
Toll Free: 800-423-2594  
[www.multicominc.com](http://www.multicominc.com)  
[multicom@multicominc.com](mailto:multicom@multicominc.com)

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## 806MHz Channelized-Agile CATV A/V Modulator



Front View



Rear View

### RF

<b>Channels:</b>	125 channels (CATV 2-125)
<b>Frequency Range:</b>	54-806 MHz
<b>Output Level:</b>	60 dBmV min., adjustable
<b>Output Control Range:</b>	13 dB
<b>Output Impedance:</b>	75 ohms
<b>Output Return Loss:</b>	-15 dB
<b>Audio/Video Ratio:</b>	Adjustable -7 to -22 dB Below video carrier
<b>Frequency Stability:</b>	±5 kHz in aeronautical band
<b>Spurious Output:</b>	-60 dB below video carrier with A/V ratio @ -15 dB
<b>C/N (In-Band):</b>	>60dB
<b>C/N (Out-of-Band):</b>	>65dB
<b>Fv+6 MHz (Upper Adj. Reject):</b>	>60dBc
<b>Fv+1.5 MHz (Lower Adj. Reject):</b>	>60dBc
<b>I.F Frequency:</b>	<b>Video</b> 45.75 MHz <b>Audio</b> 41.25 MHz

### Video

<b>Input Level:</b>	1.0 V p-p min for 87.5% mod.
<b>Input Type:</b>	Clamped video neg. sync
<b>Frequency Response:</b>	±0.8 dB, 30 Hz to 4.2 MHz
<b>Differential Gain:</b>	<5% (10 to 90% APL)
<b>Differential Phase:</b>	<5° (10 to 90% APL)
<b>Chrominance luminance delay:</b>	*See note

\*NOTE: Meets FCC group delay predistortion requirements for color transmission.

### Audio

<b>Base-band Input Impedance:</b>	600 ohms unbalanced
<b>Base-band Input Level:</b>	0.5 Vp-p for 25 kHz peak dev.
<b>Preemphasis:</b>	75 microseconds
<b>Flatness:</b>	1.5 dB max. 50 Hz to 15 KHz
<b>Connectors:</b>	RF and Video - "F" type Audio - Terminal strip

### General

<b>Power Input:</b>	Switching 90-260 VAC
<b>Operating Temperature:</b>	-10° C to +50° C
<b>Dimensions:</b>	19"(L) x 9"(D) x 1 <sup>3</sup> / <sub>4</sub> "(H)
<b>Weight:</b>	7.4 lbs.
<b>Connectors:</b>	<b>RF &amp; Video</b> "F" type <b>Audio</b> Terminal strip

### Ordering Information

M860 -  Specify CATV or UHF

Order From:



Toll Free: 800-423-2594  
www.multicominc.com  
multicom@multicominc.com