



MPCMA

Universal-Chassis Agile A/V Mini-Modulator

- 135-Channel Range 54-860 MHz (CATV 2-135)
- >45dBmV min adjustable output for optimum carrier-to-noise performance
- Compatible with most manufacturers mini-modulator chassis
- State-of-the-art digital phase-locked-loop (PLL) design guarantees precise frequency locking for solid drift-free operation
- Microprocessor control enables quick digital push-button channel selection for ease of installation, configuration, and improved system uptime
- SAW (surface acoustic wave) filtered for superior adjacent channel performance enables drop-in channel expansion
- BTSC stereo compatible pre-emphasis disable switch provides pass-through for stereo signals
- In-band carrier-to-noise ratio >65dB ensures superior picture quality
- Automatic selection of aeronautical offsets (12.5kHz, 25kHz) for trouble-free configuration
- Front panel access to controls enables easy setup
- IRC and HRC offset available for frequency settings in systems using offset channels



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The **MPCMA** is a professional grade microprocessor-controlled agile audio/video mini-modulator. This modulator accepts any audio-video baseband television signal and provides a 45dBmV minimum output on CATV channels 2 to 135 (54-860 MHz) while accommodating HRC and IRC offset frequencies. Channel selection is easily accomplished via channel up/down buttons located on the front panel while built-in RF muting circuitry prevents interference during online channel reassignment. This **MPCMA** features >90dB out-of-band carrier-to-noise ratio, allowing virtually unlimited numbers of **MPCMA**'s to be combined in a system without the need for external bandpass filtering. Up to 12 or 16 units can be installed "mix-and-match" in **Pico Macom's MPC12, MPS12, MPC12R or MPC16** chassis with **MPSM45 and MPCM45** mini-modulators or **MPCD** mini-demodulators. Its unique design enables it to be installed in other manufacturers' mini-mod chassis. The unit's tracking filter technology and double-heterodyne conversion ensure accurate and spurious-free output. The **MPCMA** uses SAW filtering in conjunction with FCC group delay correction circuitry to provide superior adjacent channel selectivity. The unit's PLL circuitry in conjunction with the non-volatile memory contained in the microprocessor ensures easy and reliable channel selection and restoration. The **MPCMA** modulator is shipped with all internal adjustments preset. **Pico Macom** backs up this product with its industry leading 5-year limited warranty.

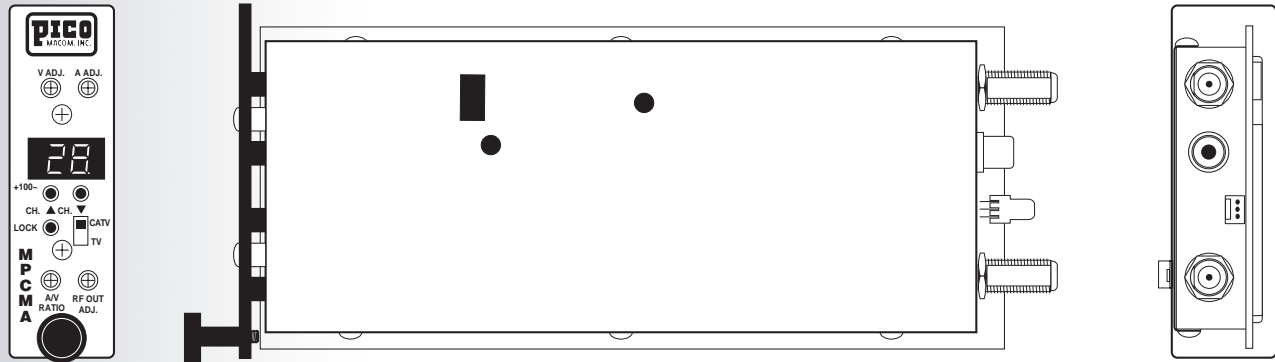
Order From:



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RF

Channels:	135 Channels
Frequency Range:	54-860 MHz (CATV Ch. 2-135)
Output Impedance:	75 Ohms
RF Output Level:	45 dBmV, adjustable from front panel (min.)
Output Return Loss:	-15 dB
Audio/Video Ratio:	Adjustable -7 to -22 dB below video carrier
Frequency Stability:	±5 kHz in aeronautical band; conforms to FCC Docket 21006
Spurious Output:	-60 dB below video carrier with A/V ratio @ 15 dB
C/N (In-Band):	>65 dB
C/N (Out-Of-Band):	>90 dB
Fv+6 MHz (Upper Adj. Rejection):	>-60 dBc
Fv-1.5 MHz (Lower Adj. Rejection):	>-60 dBc
I.F. Frequency:	Video 45.75 MHz
Audio	41.25 MHz

Audio

Hum And Noise:	-60 dB @ 87.5% modulation
Audio Baseband Input Impedance:	600 Ohms
Audio Baseband Input Level:	0.5 V p-p for 25 kHz peak deviation
Preemphasis:	75 microsecond
Flatness Audio:	1.5 dB (50 Hz to 15 kHz)

Video

Video Input Level:	1 V p-p minimum for 87.5% modulation
Video Input Type:	Clamped video negative sync
Video Frequency Response:	±0.8 dB, 30 Hz to 4.2 MHz
Differential Gain:	<5% (10 to 90% APL)
Differential Phase:	<5° (10 to 90% APL)
Chrominance Luminance Delay:	<50 nsec, standard or FCC predistortion option

General

Dimensions:	1"(W) x 8"(D) x 3.45"(H)
Weight:	0.8 lbs.
Power Input:	5 VDC, 12 VDC @ .25A
Operating Temperature:	-10° C to 50° C
Connectors:	Video In/RF Out "F" type
Audio In	RCA

Ordering Information

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