



- Re-broadcast quality performance specifications match those of fixed channel modulators
- Integrated BTSC Stereo (optional)
- 60 dBmV minimum output for optimum carrier-to-noise performance
- Precision SAW filter for superior adjacent channel performance enables drop-in channel expansion
- State-of-the-art digital phase-locked loop (PLL) design guarantees precise frequency locking for solid drift-free operation
- Superior design including automatic band-splitting filters for excellent carrier-to-noise ratio (>65 dB)
- Bright LED bar graph provides simple modulation set-up
- Microprocessor tuning control provides digital display with push-button channel selection for ease of installation, configuration and servicing
- Rear panel interfaces accept baseband video and three audio formats to provide maximum installation flexibility
- Composite and separate audio and video IF loops allow compatibility with encoders, ghost cancellers and video override applications
- MPX stereo loop provides encoded stereo input and compatibility with Emergency Alert equipment
- IRC and HRC input and output offset available for frequency setting in systems using offset channels

The **MACOM A860** agile modulator is a frequency agile audio/video professional re-broadcast grade, microprocessor controlled CATV modulator. Attractive and easy to operate, the sleek design highlights the useful front panel modulation bar-graphs and channel indicators. The simple push button tuning interface allows the **A860** to be configured for CATV standard, HRC, and IRC or North American broadcast channels with an RF output of 60 dBmV. The front panel output test point provides a quick reference test point prior to channel combining equipment, saving time and service interruption during setup and maintenance. The **A860** features rear panel interface connections for input of NTSC video and monaural and discrete left and right audio. The integrated stereo encoder (optional) will provide a BTSC stereo encoded output channel. MPX loop and 4.5 MHz (modulated) audio input connections are provided to bypass the internal stereo encoder for compatibility with external units; additionally, the MPX loop is useful when used with the **EAS-12B** emergency override system. A composite audio/video IF loop provides compatibility with scrambling encoders, ghost cancellers, and IF override applications. The unit conforms to FCC Docket 21006 for frequency accuracy. The **MACOM** line is backed by an industry leading 5-year limited warranty.

A860

Product Specifications



Front Panel



Rear Panel

RF Output

Frequency Range:	54-860 MHz
Level:	60 dBmV min
Level Adjustment:	20 dB
Impedance:	75 ohms
Frequency Stability:	±3 kHz
Audio/Video Ratio:	-10 to -20 dB Adjustable
Output Return Loss:	-18 dB
In Band Spurious:	-62 dB
Out of Band Spurious:	-65 dB
VSB Response:	-60 dB min
C/N (In-Band):	>62 dBc
C/N (Out-of-Band):	>65 dBc

IF Output

Video Level:	38 dBmV
Audio Level:	22 dBmV
Composite Level:	35 dBmV
Video Stability:	±3 kHz
Audio Stability:	±2 kHz
Impedance:	75 ohms

4.5 MHz Input

Level:	37 dBmV
Impedance:	75 ohms

Video Input

Level:	.7-1.0 V p-p
Frequency Response:	±1.0 dB max
Impedance:	75 ohms
Differential Gain:	<2% typ
Differential Phase:	<1° typ
Chrom / Lumin Delay:	±8 ns
Hum and Noise:	-60 dB

Audio Input

Level - Mono:	0.5 V p-p - 1 V p-p
Level - Left Audio:	0.5 V p-p - 1 V p-p
Level - Right Audio:	0.5 V p-p - 1 V p-p
Frequency Response:	±1.5 dB max
Impedance:	600 ohms
Preemphasis:	75 µs switchable

MPX/BTSC Stereo

Level:	2.2 V p-p
Impedance:	500 ohms
Frequency Response:	1 dB, 50 Hz - 14 kHz
Total Harmonic Distortion:	<0.3%
S/N:	75 dB
Separation:	35 dB, 50 Hz - 12 kHz

General

Power Input:	90-260 VAC, 28 W
Operating Temperature:	-10°C to 50°C
Dimensions:	19"(L) x 12"(D) x 1.75"(H)
Weight:	7.8 lbs.
Connectors:	RF & Video "F" type
Audio:	600 ohms terminal strip

Ordering Information

A860 Agile Modulator
A860S Agile Stereo Modulator

Related Products

D860 Agile A/V Stereo Demodulator
EAS-12B Emergency Override System
C860 Bi-Directional Combiner
L860 Bi-Directional Launch Amplifier
DSP806 HDTV Agile Channel Processor