

VMM860AG

AGILE VIDEO MODULATOR



DRAKE
DIGITAL



The VMM860AG is an agile, high quality, vestigial sideband, heterodyne audio/video modulator with synthesized visual and aural carriers. One to twelve modulators or other accessories can be mounted in the same amount of rack space typically required for two standard size units. Ideally suited for private cable, hotels and motels, institutional, and SMATV applications, the VMM860AG accepts video and audio baseband signals from a satellite receiver, TV camera, videotape recorder, TV demodulator, or similar signal sources.



Features

- Convenient Pushwheel Switches for Channel Selection.
- Standard CATV channels 2 - 135 or Broadcast channels 2 - 69 selectable from front panel.
- IRC & HRC CATV channel formats selectable by internal jumper.
- Stereo ready utilizing BTSC stereo baseband. Rear panel pre-emphasis disable switch provided.
- Agility allows for "hot standby" solutions in headends.
- Agility allows for minimal service stock.
- An Economical NTSC vestigial sideband modulator.
- +45 dBmV output. Adjustable from +35 to +45 dBmV.
- SAW filtering for superior adjacent channel performance.
- Front panel control of RF output level, A/V ratio, and video/audio modulation.
- Complies with FCC Rules Part 76.
- Use up to 12 VMM860AG modulators in a two rack height space powered by a single PSM121 Power Supply.
- Use up to 4 VMM860AG modulators in a one rack height space by using the RMM4 Rack and Power Supply.
- Rack mount and high capacity PSM121 Power Supply sold separately.

VMM860AG Technical Specifications

RF	
Frequency Range:	Agile, 54 through 860 MHz.
Frequency Selection:	Standard CATV Channels 2 through 135 HRC and IRC options available by moving an internal jumper. Broadcast TV Channels 2 through 69
Output Level:	+45dBmV minimum, typically adjustable from +35 to +45 dBmV
Output Impedance:	75 Ohms, return loss typically 8 dB
A/V Ratio:	Audio Carrier -22 to -12 dB, referenced to video carrier, adjustable
Frequency Stability:	± 5 KHz
Intercarrier Frequency:	4.5 MHz
FCC Frequency Offsets:	Automatic (+12.5 KHz, +25 KHz, or none as required for each channel)
Spurious Outputs (5-1000 MHz):	-60 dBc, measured at -15 dB A/V ratio and with modulator output level of +45 dBmV
In Channel C/N:	65 dB typical, 4MHz bandwidth
Broadband Noise:	-78 dBc typical, 4 MHz bandwidth @ 45 dBmV output
Video	
Input Level for 87.5% modulation:	0.65 Vp-p to 1.5 Vp-p, manual gain adjustable with front panel control
Input Impedance:	75 Ohms, return loss of 26 dB minimum
Frequency Response:	20 Hz to 4.2 MHz, ± 1 dB
C/L Delay:	within 50 nSec. of 0 nSec. (standard) F.C.C. predistortion available by special order.
Differential Gain:	± 3% (10 to 90% APL)
Differential Phase:	± 3 degrees (10 to 90% APL)
Audio	
Input Level for 25 kHz Peak Deviation:	125 mVrms to 2.5 Vrms. Manual gain adjustment with front panel control
Input Impedance:	>10K Ohms, unbalanced
Pre-emphasis:	75 μ Seconds (Defeatable via rear panel switch for BTSC baseband stereo compatibility)
Frequency Response:	40 Hz to 15 kHz, ± 1 dB referenced to 75 μ second pre-emphasis curve. 40 Hz to 100 kHz, ± 0.5 dB if pre-emphasis is defeated.
Signal to Noise Ratio:	65 dB