



## VM2862 & VM2860 Technical Specifications

<b>RF</b>	
Frequency Range:	54-864 MHz standard CATV channels 2-135 Broadcast, HRC, and IRC channel plans available by internal jumper.
Output Level:	+60 dBmV minimum, 12 dB minimum adjustment range. Note: If an output level of less than +50 dBmV is required, add an attenuator of the appropriate value to the modulator output.
Output Impedance:	75 Ohms, 12 dB return loss within output filter passband.
A/V Ratio:	Audio carrier -25 to -12 dB referenced to video carrier, adjustable.
Frequency stability:	±5 ppm. All oscillators locked to the same internal reference.
Amplitude stability:	±1 dB.
FCC Frequency Offsets:	Automatic, positive.
Spurious Outputs:	-60 dBc measured at -15 dB A/V ratio and with modulator output level of +60 dBmV, 5 MHz to 1000 MHz.
Phase Noise:	-85 dBc measured at 10 KHz offset.
Output Filter Bands:	54 MHz to 258 MHz, 258 MHz to 462 MHz, 462 to 660 MHz, and 660 MHz to 864 MHz.
Broadband Noise:	-80 dBc, 4MHz bandwidth, +60 dBmV output level, ±18 MHz offset within output filter passband. -90 dBc, outside of output filter passband, output filtered into 4 approximately 200 MHz wide bands.
<b>Video</b>	
Input Level:	1 Vp-p ±3 dB manual gain adjust with LED front panel modulation indicators.
Input Impedance:	75 Ohms, return loss of 25 dB.
Frequency Response:	20 Hz to 4.2 MHz, ± 1.0 dB with 4.5MHz trap off. 20 Hz to 4.1 MHz, ± 1.0 dB with 4.5MHz trap on.
In-channel C/N:	65 dB.
Differential Gain:	± 3%.
Differential Phase:	± 3 degrees.
L/C Delay:	± 50 nS of FCC predistortion with 4.5 MHz trap off, -20 + 80 nS of FCC predistortion with 4.5 MHz trap on.
<b>Monaural Audio</b>	
Input level:	250 mVrms to 2.5 Vrms, manual gain adjustment with LED modulation indicators.
Input Impedance:	10 K Ohms, unbalanced.
Pre-emphasis:	75 µS.
Frequency Response:	50 Hz to 15 kHz, ±1 dB.
Total Harmonic distortion:	0.5% maximum.

*Specifications, price, and availability are subject to change without notice or obligation.*

Signal to Noise Ratio (S/N):	65 dB.
BTSC MTS Stereo Audio	(applies only to model VM2862)
Input level:	250 mVrms to 2.5 Vrms, manual gain adjustment with LED modulation indicators.
Input Impedance:	10 K Ohms, unbalanced.
Stereo Channel Separation:	30 dB, 50 Hz to 12.5 kHz 25 dB, 12.5 kHz to 14 kHz.
Frequency Response:	±0.5 dB, 50 Hz to 14 kHz.
Total Harmonic distortion:	0.5% maximum.
Signal to Noise Ratio (S/N):	65 dB.
SAP Audio - (Field Installed Option)	(applies only to model VM2862)
Input level:	250 mVrms to 2.5 Vrms, manual gain adjustment and LED modulation indicator on rear panel.
Input Impedance:	10 K Ohms, unbalanced.
Total Harmonic distortion:	1% maximum.
Signal to Noise Ratio (S/N):	80 dB.
<b>EAS Input</b>	
Input level:	+30 dBmV, ±1 dB (visual carrier).
Input Impedance:	75 Ohms, 20 dB return loss.
Auto Switching Level:	+20 dBmV.
Isolation:	60 dB.
<b>General</b>	
AC Power Input:	115 VAC, ±10%, 60 Hz, 23 watts (VM2860), 28 watts (VM2862),
Fuse:	1/2 Amp Slo-Blo 5 x 20 mm.
Operating Temperature Range:	0° to 50° C, ambient
Cooling:	Internal 1.85 CFM fan allows operation in the rack without air space between units.
Radiated Emissions:	FCC Part 15
Size:	1.75"H x 19"W x 11.25"D
Weight:	8.5 lbs.