

3MHz Multi Waveform Signal Generator with Modulation



Application

Aplab 3MHz Multiwaveform Signal Generator, Model MSGM3M is a value to money answer to engineer's & Scientist test requirement. It has built-in AM / FM / ASK / FSK & PWM modulation waveform which are useful in testing of amplifier, modulators & demodulators.

Features

- 0.3Hz to 3MHz Frequency Output in 8 Ranges
- Versatile Waveforms: Sine, Square, Triangle, Ramp, Pulse and DC outputs
- Standard AM, Balance AM, FM, ASK, FSK, PWM Modulation and Sweep Mode
- Internal / External Modulation
- 20 Vp-p Output Level
- 60dB Attenuation
- Variable DC Offset Control
- Low Distortion for Sine Waveform 1% typically
- Variable Symmetry for Generating Sawtooth and Pulse Waveforms
- 4 Digits Display
- Dedicated Auxillary Function Generator upto 20KHz

Technical Specifications

Output Characteristics	
Output Waveform	Sine, Triangle, Square, Ramp, Pulse, AM Balance, AM Standard, FM, ASK, FSK, PWM Sweep and DC.
Output Level	20Vp-p in Open Circuit, 10Vp-p in 50W Load.
Output Attenuator	20, 40dB \pm 1dB and 20dB continuously variable.
Output Impedance	50W \pm 5%.
DC Offset	\pm 10V (DC \pm AC peak) into Open Circuit. \pm 5V (DC \pm AC peak) into 50W Load.
Frequency Characteristics	
Range	0.03Hz to 3MHz in 8 Ranges.
Indication Accuracy	\pm 0.1%, +1 Digit.
Waveform Characteristics	
Square Rise & Fall Time	<50ns.
Symmetry / Duty Cycle	15% to 85% variable.
Triangle wave Non-Linearity	\pm 0.5% (typically at 1KHz).

Sinewave Distortion	<1% (Typically).
Amplitude Flatness	±2%.
Sweep Characteristics	
Sweep Type	Linear.
Sweep Range	25 : 1.
Sweep Rate	20msec to 4sec variable.
Modulation Characteristics	
<i>Auxillary Function Generator for Int. Modulation</i>	
Waveforms	Sine, Square, Triangle.
Frequency Range	2Hz to 20KHz.
Output Level	10Vp-p.
Amplitude Modulation	
Mode	Standard / Balance.
Carrier Freq. B.W.	Upto 1MHz.
Int. Mod. Freq.	2Hz to 20KHz..
Int. Mod. Index	30% to 100%.
Ext Modulation	100% for 2Vp-p.
Ext. Mod. Freq.	DC to 20KHz.
Frequency Modulation	
Deviation	0 to 10% of the range.
Ext Modulation	10% for 2Vp-p.
Ext. Mod. Freq.	DC to 20KHz.
Frequency Counter	
Mode	MAIN / AUX Generator.
Display	4 Digits Display.
Freq. Range	0.3Hz to 3MHz.
Display Accuracy	±0.1% +1 Digit.
General	
Power Requirement	230V ±10V, 50Hz AC Supply.
Dimensions	270 (W) x 88 (H) x 310 (D) w/o packing / 325 (W) x 153 (H) x 380 (D) with packing.
Weight	3 Kg. (w/o packing) / 4 Kg. (with packing).
Accessories	Instruction Manual - 1 No. BNC Alligator Clip - 1 No. Mains Cord - 1 No.
Optional Accessory	50 ohms termination.

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