

CREDIX Co., LTD

Signal Generators

➤ SG-1501B : FM Stereo/FM/AM Signal Generator



INTRODUCTION :

The model SG-1501B is synthesized signal generator which has frequency range from 100kHz to 150MHz. It generates CW and FM/AM modulation signals, its output range is from -20dB μ to 126dB μ .

This advanced FM/AM signal generator can be controlled by external equipment through GPIB interface.

FEATURES :

- Wide band coverage (100kHz~150MHz) and high accuracy (100Hz in full range).
- Output level can be specified by 0.1dB step between -20dB μ to 126dB μ .
- Presetting function for simple operation.
- STEREO Function
- Compact size and light weight.
- Crystal oscillator stability : 5×10^{-6} (5ppm)
- Options : GPIB, Remote Controller

FREQUENCY

Range	100kHz~150MHz(76MHz~110MHz, FM Stereo)
Resolution	100Hz
Accuracy	5×10^{-6} (5ppm)

OUTPUT LEVEL

Range	-20dB μ ~126dB μ at open circuit(-133dBm ~ 13dBm into 50 Ω termination)
Resolution	0.1dB
Accuracy	± 1 dB at 100 dB μ
Attenuator Accuracy	± 1.5 dB(126~100 dB μ) , ± 1 dB(20~100 dB μ) , ± 2 dB(-20~20 dB μ)
Output Impedance	50 Ω , VAWR less than 1.2
Spurious & Harmonics Residual	≤ -30 dBc
Modulation(S/N)	FM Component : 70dB or more AM Component : 50dB or more

MODULATION

Internal Modulation	Frequency : 400Hz, 1kHz
External Modulation	Input Impedance: 10k Ω unbalanced $\pm 10\%$ Input Voltage : 3Vp-p $\pm 2\%$
FM Range	0~100kHz (@1MHz~150MHz) Carrier Frequency $\times 10\%$ (@<1MHz) Pre-Emphasis off, 25usec,50usec,75usec
Accuracy	$\pm 10\%$ of maximum frequency deviation
Distortion	<0.06% (@ 10.7MHz, 76~110MHz) <0.11% (@ other range) (with Dev=75kHz, AF 1kHz, Demod. BW=50Hz~15kHz, DE-emp.=50 μ s ec)
AM Range	0~60%
Resolution	0.1%
Accuracy	$\pm 5\%$ at internal rate(100kHz~110MHz) $\pm 10\%$ at internal rate(110MHz~150MHz)
Distortion	<0.65% (@ 400kHz~30MHz) < 1.5% (@ other range) (with Depth =30%, AF 1kHz, Demod. BW=50Hz~15kHz)