

JSG-1610A – Signal Generator



Model: JSG-1610A
Manufacturing: JUNGJIN

Introduction

The model SG-1501B is synthesized signal generator which has frequency range from 100 kHz to 1100 MHz. 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 (100 kHz to 1100 MHz) 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 lightweight.

Crystal oscillator stability: 5×10^{-6} (5ppm)

Options: GPIB, Remote Controller

FM/AM Signal Generator

Frequency

Frequency Range: 200 kHz ~ 1100 MHz

Display: 9-digit LED

Resolution: 10 Hz (full bandwidth)

Accuracy: $\pm 1.0 \times 10^{-6}$

OUTPUT LEVEL

Range: -14 dBu ~ 126 dBu at open circuit (-127 dBm to 13 dBm)

Resolution: 0.1 dB

Accuracy: -4 dBm ~ 13 dBm (± 1.0 dB); -37 dBm ~ 127 dBm (± 1.5 dB)

Output Impedance: 50 Ohms

VSWR: <1.2:1

Flatness: ± 1.2 dB at 0 dBm

Harmonics: <-30 dBc

>550 MHz: Harmonic in 2.5 dBc

Residual Modulation of < 50 dBc <-137 MHz, <-60 dBc of 137.5 ~ 1100 MHz

Parasite FM: <30 Hz CF: 137.5 MHz

Reverse Power Protection: 25 W max.

MODULATION

Internal Modulation: Frequency: 400 Hz or 1 kHz $\pm 1\%$

External Modulation: Impedance: 600 Ohms

Unbalanced, Input Voltage: 1 V_{peak}

FM

Range: 0 ~ 500 KHz (CF: 137.5 to 275 MHz)

0 ~ 1MHz (CF: 3 ~ 137.5 MHz and 275 ~ 1100 MHz)

Resolution: 10 Hz (dev <10 kHz),

100 Hz (dev <100 KHz), 1 kHz (dev <1 MHz)

Accuracy: $\pm 6\%$ at internal rate (typically 3%)

Distortion: <2% (with 75 kHz dev, AF 1 kHz,

Demod. BW = 50 Hz ~15 kHz, De-emp.=50 usec)

AM

Range: 0 ~ 99.9 MHz (<7 dBm)

Resolution: 0.1%

Accuracy within (± 6 dB value)

Distortion: <5% (70 ~ 90% AM), <3% (30 ~ 70% AM), <1.5% (0 ~ 30% AM)

Parasite FM Audio Signal at 1 kHz, AM 30% less than 75 Hz

Power Requirements

Power: 100/12/220/240VAC, 50/60 Hz 84 W

Physical Characteristics

Length: 460 mm

Width: 428 mm

Height: 115 mm

Weight: 16.5 kg