

rf/microwave instrumentation

Model LN1000B, M1 through M3 Low Noise Pre-Amp 10kHz-1000MHz

The Model LN1000B is a broadband, self-contained linear amplifier for laboratory applications requiring instantaneous bandwidth and low noise.

The LN1000B is useful for amplifying low level signals to more useful levels for driving power amplifiers and other similar applications. In addition, with its low noise figure it can be used to increase the sensitivity of receivers with relatively high noise figures.

The LN1000B contains an internal power supply which automatically adjusts for the AC input voltage. The AC input connector is an IEC 320 type located on the rear panel

The LN1000B can be supplied in a benchtop cabinet with the RF connectors located on the front panel or the rear panel. The LN1000B can also be supplied without the cabinet for rack mounting, front or rear RF connectors.

SPECIFICATIONS

POWER OUTPUT	+11 dBm at less than 1 dB gain compression
FREQUENCY RESPONSE	10kHz-1000MHz
INPUT FOR RATED OUTPUT	–18 dBm maximum
GAIN	30 dB minimum
GAIN FLATNESS	±1.5 dB
NOISE FIGURE	3.5 dB typical, 4.5dB maximum (2–1000MHz)
INPUT IMPEDANCE	50 ohms, VSWR 2.5:1 maximum
OUTPUT IMPEDANCE	50 ohms, VSWR 2.0:1 maximum
MISMATCH TOLERANCE	100%, will operate without damage, foldback or oscillation with any magnitude and phase of source and load impedance.
MODULATION CAPABILITY	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
HARMONIC DISTORTION	–20 dBc maximum at +11 dBm output
THIRD ORDER INTERCEPT POINT	+21 dBm typical
PRIMARY POWER (selected automatically)	100-240 VAC, 50/60 Hz with an IEC 320 AC input connector

		MODEL CONFIGURATIONS		
MODEL	CONNECTORS	STYLE	SIZE (W x H x D)	WEIGHT
LN1000B	N Front	Benchtop	26.0 x 11.7 x 21.6 cm	4.5 kg, 10.0 lbs
			10.3 x 4.6 x 8.5 in	
LN1000BM1	N Rear	Benchtop	26.0 x 11.7 x 21.6 cm	4.5 kg, 10.0 lbs
			10.3 x 4.6 x 8.5 in	
LN1000BM2	N Front	Rack mount	24.1 x 8.9 x 20.3 cm	1.8 kg, 4.0 lbs
			9.5 x 3.5 x 8.0 in	
LN1000BM3	N Rear	Rack mount	24.1 x 8.9 x 20.3 cm	1.8 kg, 4.0 lbs
			9.5 x 3.5 x 8.0 in	