

rf/microwave instrumentation

Model LN1000A, M1 through M6 Low Noise Pre-Amp 10kHz-1000MHz

The Model LN1000A is a broadband, linear amplifier for laboratory applications requiring instantaneous bandwidth and low noise.

It 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.

SPECIFICATIONS

POWER OUTPUT	+11 dBm at less than 1 dB gain compression
FREQUENCY RESPONSE	10 kHz–1000 MHz
INPUT FOR RATED OUTPUT	–18 dBm maximum
GAIN	30 dB minimum
GAIN FLATNESS	±1.5 dB
NOISE FIGURE	3.5 dB typical, 4.5 dB maximum (2–1000 MHz)
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
RF CONNECTORS	See Model Configurations
WEIGHT	0.68 kg (24 oz)
SIZE (WxHxD)	12.7 x 3.8 x 5.1 cm (5.0 x 1.5 x 2.0 in) (exclusive of power supply and connectors)

MODEL CONFIGURATIONS

MODEL	CONNECTORS	COMMENTS
LN1000A	BNC female	
LN1000AM1		Obsolete
LN1000AM2	SMA female	
LN1000AM3	N female	
LN1000AM4	SMA female	Includes Gain vs. Frequency plot covering 10kHz-1000MHz in 1MHz steps.
LN1000AM5	N female	Includes Gain vs. Frequency plot covering 10kHz-1000MHz in 1MHz steps.
LN1000AM6	BNC female	Includes Gain vs. Frequency plot covering 10kHz-1000MHz in 1MHz steps.