

rf/microwave instrumentation

Model LN1500, M1 through M3 Low Noise Pre-Amp .1MHz-1500MHz

The Model LN1500 is a broadband, self-contained linear amplifier for laboratory applications requiring instantaneous bandwidth and low noise.

The LN1500 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 LN1500 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 LN1500 can be supplied in a benchtop cabinet with the RF connectors located on the front panel or the rear panel. The LN1500 can also be supplied without the cabinet for rack mounting, front or rear RF connectors.

SPECIFICATIONS

| POWER OUTPUT | +10 dBm at less than 1 dB gain compression | | | |
|--|---|--|--|--|
| FREQUENCY RESPONSE | 1–1500 MHz | | | |
| INPUT FOR RATED OUTPUT | –19 dBm maximum | | | |
| GAIN | 30 dB minimum | | | |
| GAIN FLATNESS | ±1.5 dB | | | |
| NOISE FIGURE | 3.8 dB typical | | | |
| 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 +10 dBm output | | | |
| THIRD ORDER INTERCEPT POINT | +20 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 |
|----------|------------|------------|-----------------------|------------------|
| LN1500 | 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 | |
| LN1500M1 | 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 | |
| LN1500M2 | 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 | |
| LN1500M3 | 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 | |