The Model LN1G18 is a broadband, self-contained linear amplifier for laboratory applications requiring instantaneous bandwidth and low noise. It has been designed specifically for use with the CER2018A receiver and AR RF/Microwave Instrumentation ATH1G18 or ATS700M11G antennas.

The LN1G18, with its low noise figure, can be used to increase the sensitivity of receivers with relatively high noise figures. It also is useful for amplifying low level signals to more useful levels for driving power amplifiers and other similar applications.

The LN1G18 contains an internal bias tee which supplies DC power to the low noise preamp via the RF cable from the CER2018A. DC power can also be connected externally.

Gain & Noise Figure Vs Frequency
SPECIFICATIONS, MODEL LN1G18

POWER OUTPUT .......................................................... +8 dBm at less than 1 dB gain compression

FREQUENCY RESPONSE ............................................... 1.0–18.0 GHz

GAIN ........................................................................... 20 dB minimum

GAIN FLATNESS ........................................................... ±3 dB

NOISE FIGURE ............................................................ 3 dB typical

INPUT IMPEDANCE ....................................................... 50 ohms, VSWR 3.0:1 maximum 1-2 GHz; 2.5:1 maximum 2-18 GHz

OUTPUT IMPEDANCE ................................................... 50 ohms, VSWR 2.5:1 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 0 dBm output

THIRD ORDER INTERCEPT POINT ............................... +20 dBm typical

PRIMARY POWER (selected automatically) ............... 7–20V, 250mA; fed thru RF cable or DC connector

CONNECTORS
    Input...................................................................... N (M) Precision
    Output.................................................................... N (F) Precision

DIMENSIONS ............................................................... 6.35 x 3.56 x 17.4 cm (2.5 x 1.4 x 6.85 in)