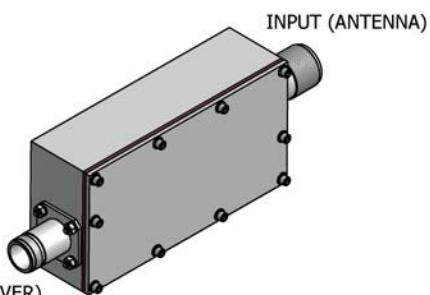


**Model LN1G18,  
Low Noise Pre-Amp  
1GHz–18GHz**

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.

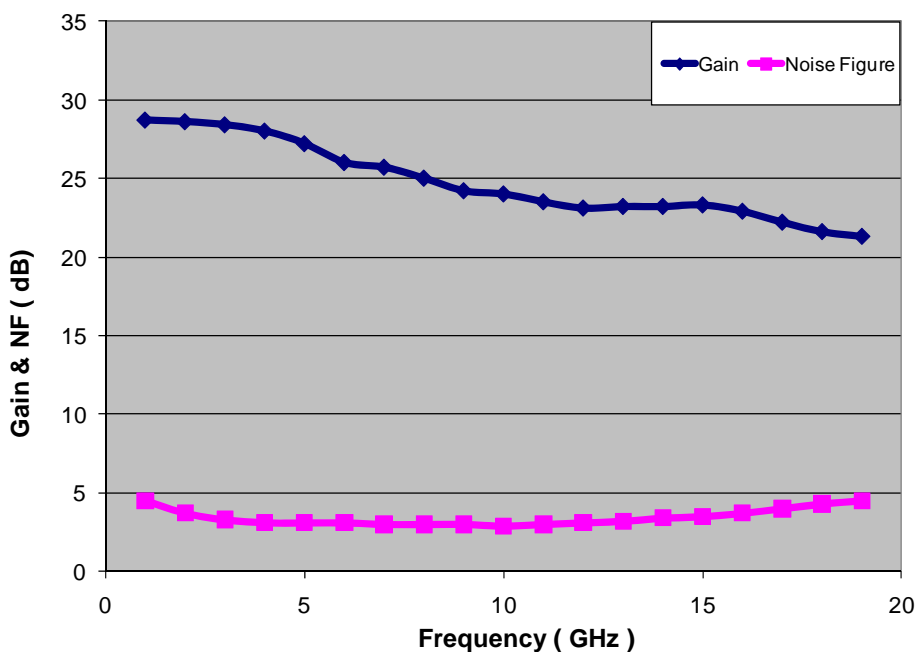


OUTPUT (RECEIVER)  
+DC BIAS

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)   |