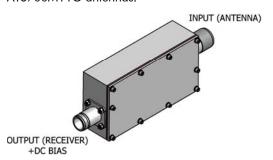


# **LN1G18**

Low Noise Pre-Amp
• 1 GHz-18GHz

### **Features**

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 DER2018 receiver and AR RF/Microwave Instrumentation ATH1G18 or ATS700M11G antennas.



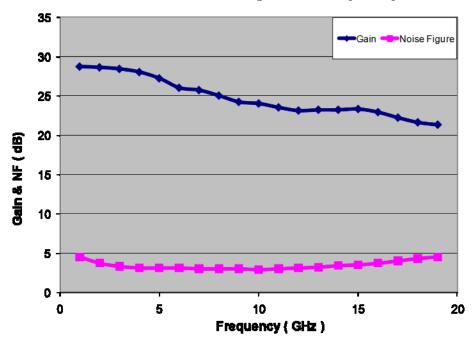
The LN1G18, with its low noise figure, can be used to increase the sensitivity of receivers with relatively high noise figures. It also is useful for amplifying low level signals to more useful

levels for driving power amplifiers and other similar applications.

The LN1G18 contains an internal bias tee which can supply DC power to the low noise preamp via the RF cable from the DER2018. DC power can also be connected externally using the included wall-mount power supply.

The export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

# Gain & Noise Figure Vs Frequency



AR RF/Microwave Instrumentation 160 School House Rd Souderton, PA 18964 215-723-8181

For an applications engineer call:800.933.8181

www.arworld.us



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### **LN1G18**

• 1 GHz-18GHz

### **Specifications**

**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 con-

nector

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)

**EXPORT CLASSIFICATION: EAR99**