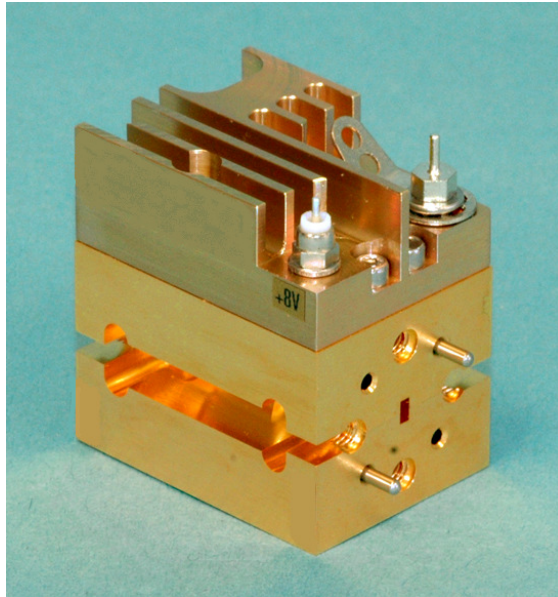


SERIES LNA

LOW NOISE AMPLIFIERS



FEATURES:

- Wideband coverage
- Modular compact design
- Military or commercial units available
- K, V or Waveguide interfaces as required
- Internal voltage regulation and bias circuitry
- State-of-the-art noise figure performance

APPLICATIONS:

- Sensitive receivers
- Spectrum analyzer preamplifiers
- Wideband radiometry
- Radar front-ends
- Communication subsystems

DESCRIPTION

Millitech's series LNA low noise amplifier utilizes advanced PHEMT MMICs and transistors for state-of-the-art noise performance in the 18 to 110 GHz frequency range.

Each amplifier has internal bias circuitry that generates gate control voltages, provides proper voltage sequencing and bias.

The standard amplifier interfaces include coaxial connectors of 2.9 mm (K), (0 to 40 GHz), and 2.4 mm (V), (0 to 50 GHz), as well as waveguide interfaces ranging from WR-42 to WR-10.

Standard products offer sufficient gain for most applications but multiple MMIC amplifier chips can be combined or cascaded for applications that require higher gain or greater output power.

The broad bandwidth and low noise of the series LNA makes them perfect for a wide range of applications including radiometry, polarimetry, EW systems, instrumentation and radar systems. For applications requiring driver or power amplification, please refer to series AMP, Millitech's power amplifiers.

SPECIFICATIONS
Ultra Wide Bandwidth:

Part Number	F _{Low}	F _{High}	Gain (typ.) (dB)	NF (typ.) (dB)	Connector
LNA-KK-01020	24.0	40.0	23 to 15 descending with freq.	3.6	K Connector
LNA-28-01020	26.5	40.0	25 to 17 descending with freq.	2.9	WR-28
LNA-22-01020	33.0	40.0	21.5 to 17 descending with freq.	2.9	WR-22
LNA-KK-01050	5.0	40.0	12	5.0	K Connector
LNA-28-01050	26.5	40.0	12	4.0	WR-28

Very Wide Bandwidth:

Part Number	F _{Low}	F _{High}	Gain (typ.) (dB)	NF (typ.) (dB)	Connector
LNA-KK-02010	14.0	27.0	18	3.5	K Connector
LNA-42-02010	18.0	26.5	19	3.0	WR-42
LNA-KK-02060	32.0	40.0	16	4.5	K Connector
LNA-28-02060	32.0	40.0	16	3.5	WR-28
LNA-22-02060	33.0	46.0	15	3.5	WR-22
LNA-KK-02070	35.0	40.0	16 to 12 descending with freq.	4.0	K Connector
LNA-28-02070	35.0	40.0	18 to 14 descending with freq.	3.0	WR-28
LNA-22-02070	35.0	45.0	18 to 11 descending with freq.	3.0	WR-22
LNA-15-02080	50.0	55.0	11 to 8 descending with freq.	3.5	WR-15
LNA-12-02090	75.0	90.0	20	5.5	WR-12
LNA-10-02090	75.0	97.0	20	5.5	WR-10
LNA-12-02100	71.0	86.0	12	5.5	WR-12
LNA-10-02100	75.0	86.0	12	5.5	WR-10
LNA-KK-02110	26.0	40.0	17	4.3	K Connector
LNA-28-02110	26.5	40.0	19	3.3	WR-28
LNA-10-02120	82.0	100.0	16	6.0	WR-10
LNA-10-02130	82.0	100.0	30	6.5	WR-10
LNA-10-02140	75.0	110.0	16	5.0	WR-10

Wide Bandwidth:

Part Number	F _{Low}	F _{High}	Gain (typ.) (dB)	NF (typ.) (dB)	Connector
LNA-KK-03050	26.0	34.0	22.50	3.8	K Connector
LNA-28-03050	26.5	34.0	24.00	3.0	WR-28
LNA-KK-03060	27.0	36.0	18.50	4.0	K Connector
LNA-28-03060	27.0	36.0	20.00	3.2	WR-28
LNA-KK-03070	30.0	40.0	17.00	5.0	K Connector
LNA-28-03070	30.0	40.0	19.00	4.0	WR-28
LNA-22-03070	33.0	42.0	19.00	4.0	WR-22
LNA-15-03090	55.0	65.0	19.00	4.8	WR-15
LNA-10-03100	88.0	96.0	15.00	5.5	WR-10

