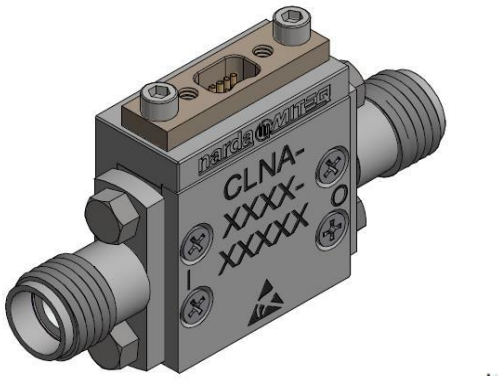
New Solutions from... narda MITEQ

Cryogenic Low-Noise Amplifiers

4K Operation · <10K Noise Temperature · Low DC power



Select optimal balance between high gain (>40dB) and low DC power (<1mW) while maintaining ultra-low noise temperature (<10K) while operating at sub-cryogenic temperature of 4K.

Narda-MITEQ is extending our cryogenic LNA offering with an addition of high-performance CLNA series specifically designed and qualified for operation at sub-cryogenic temperature down to 4K.

We have supplied Cryogenic Amplifiers for over 50 years, common applications are radio astronomy, deep-space communications, low-temperature physics and most recently quantum computing.

Superior performance of the new CLNA series is enabled by use of advanced semiconductor transistors and leverage of our long-standing experience with the design and manufacture of electronic components for use at cryogenic and sub-cryogenic temperatures.

Key features of Narda-MITEQ's Cryogenic Low-Noise Amplifier series (CLNA):

- Qualified for operation from room temperature of 293K to sub-cryogenic cold of 4K
- Ultra-Low Noise Temperature of less than 10K (less than 6K between 6.5GHz and 10GHz)
- High Linear Gain of >30dB or >40dB while combined with low power DC consumption
- Ultra-Low DC consumption of <1mW for 30dB gain and <5mW for 40dB gain at 6-7.5GHz
- Outlines with ROHS complaint and Non-magnetic materials are available

Model Number	Description
CLNA-25-0050-1000-5P	C-band Cryogenic LNA 25dB gain and 3mW power at 4K
CLNA-30-0050-1000-5P	C-band Cryogenic LNA 30dB gain and 2mW power at 4K
CLNA-40-0050-1000-5P	C-band Cryogenic LNA 40dB gain and <10K of noise at 4K
CLNA-25-0050-1000-5P-ND	C-band Cryogenic LNA with Nano-D connector, 25dB gain at 4K
CLNA-30-0050-1000-5P-ND	C-band Cryogenic LNA with Nano-D connector, 30dB gain at 4K
CLNA-40-0050-1000-5P-ND	C-band Cryogenic LNA with Nano-D connector, 40dB gain at 4K

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