



# S-band Cryogenic LNA

## TTI-CLNA-2048

Cryogenic Low Noise Amplifiers for Radio Astronomy or Space Communications

### TECHNICAL SPECIFICATIONS

#### ELECTRICAL

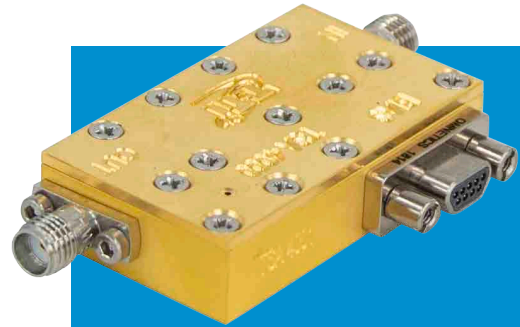
Frequency Range	2.0 – 4.8 GHz
Technology	InP / GaAs
Noise Temperature	< 4 K
Average Gain	> 28 dB
Gain Flatness	1.5 dB p-p
Input matching	see typical performance in the graph below
Output matching	≤ -15 dB
Impedance	50 Ohms

#### MECHANICAL INTERFACES & PHYSICAL

Input Connector	SMA (female or male)
Output Connector	SMA (female or male)
Power Connector	MDM 9PHSB
Dimensions (L x W x H)	48 x 32.5 x 9 mm or 44.5 x 25.8 x 10.5 mm
Weight	46 g

#### POWER SUPPLY

Power Consumption	< 8 mW
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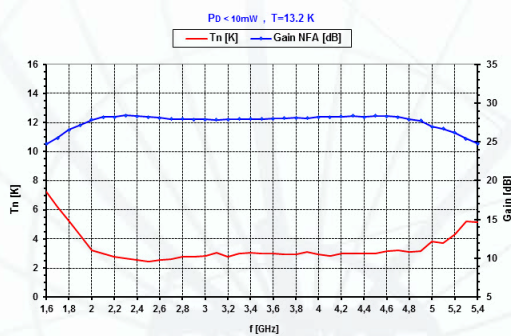
### Key Features

- Very low noise temperature
- Highly reliable
- Extremely stable

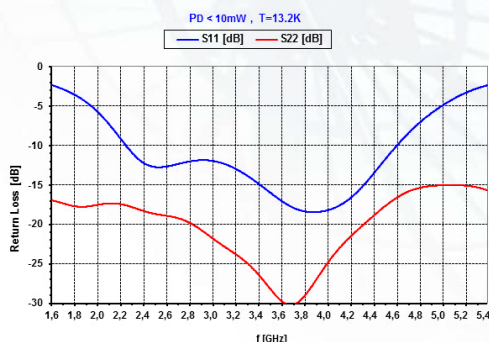
TTI-CLNA-2048 is an S-band Cryogenic Low Noise Amplifier designed to operate at extremely low temperatures (4 to 15 K).

Efficiency is key for Cryogenic amplifiers so we offer very low current consumption and a very light weight.

TTI-CLNA-2048 is extremely stable and highly reliable at cryogenic operating temperatures.



Typical gain and noise performance at cryogenic temperature



Typical input and output return losses at cryogenic temperature