

C-Band Tropo LNB 55°K

ALNB-CT™ series

C-band LNB for Advanced Tropospheric Scattering Transmission Applications



Features

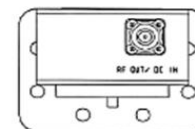
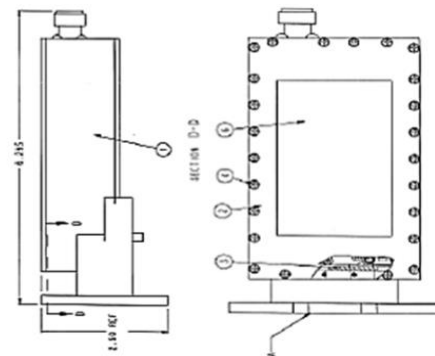
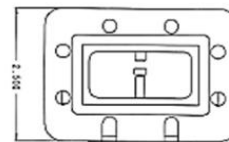
- Tropo C-Band (4.5 – 5.0 GHz)
- GaAs/HEMT Technology
- Over 200,000 Hours MTBF
- Built-in Regulator +11 to +15 VDC operation
- Pressurizable W/G Input
- Power supply and external 10 MHz via L-Band Connector
- Extreme operating temperature
- Weatherproof housing

Overview

The Advantech Wireless Technologies Low Noise Block (LNB) ALNB-CT™ is a low noise, highly dynamic range amplifier suitable for use in Tropo receiver applications where ultra-low noise and high reliability are critical, as well as in other systems operating in the frequency range of 4.4 to 5.0 GHz.

These LNBs are addressing a new generation of Tropo Scattering systems, designed to operate in L-band instead of the traditional 70 MHz IF band. This translates in an overall system cost reduction, by removing the need for separate frequency converters.

The Advantech Wireless TROPO LNBs provide an industry leading MTBF of over 200,000 hours.



Options

- Input Isolator
- Redundant operation

Accessories

Contact Advantech Wireless Technologies for a complete line of GaN based Tropo SSPAs, with L-band input

C-Band Tropo LNB 55°K

Technical Specifications	
Electrical Characteristics	
Frequency range	4.4 – 5.0 GHz
IF band	950-1550 MHz
Local Oscillator freq.	3.45 GHz
External Reference Frequency	External 10 MHz via IF connector
Noise Temperature @ 23°	55°
Gain	50 dB min
Gain slope	0.6dB/ 40MHz
Gain variation over operating temperature range	± 2 dB p.p. max
Gain stability @ constant ambient temperature	± 0.1dB / hour ± 0.2dB / 24 hours
Output power at 1dB of compression	+13 dBm min
Spurious	-55 dBc max
Input VSWR	2.5:1 Typical
Output VSWR	1.9:1
Operating voltage	11 - 15 VDC
Current consumption	350 - 450 mA
Mechanical Characteristics	
Dimensions (L x W x H)	6.295" x 2.50" x 4.166"
Weight	1.32lb (600 gr)
Input waveguide flange	CPR 187 G
Output connector	N Type female
Environmental Conditions	
Operating temperature	-40°C to +55°C -50°C to +60°C (Optional)
Humidity	100%, condensing (2" rain/hour)
Altitude	10,000' AMSL, de-rated 2°C/1,000' from AMSL

Ref.: PB-ALNB-CT-55-21083

NORTH AMERICA

USA
info.usa@advantechwireless.com

CANADA
Info.canada@advantechwireless.com

EUROPE

UNITED KINGDOM
info.uk@advantechwireless.com

SOUTH AMERICA

info.latam@advantechwireless.com

BRAZIL
info.brazil@advantechwireless.com

ASIA

info.asia@advantechwireless.com

INDIA
info.india@advantechwireless.com