The ACLNA-Ka family of LNAs is designed for the most challenging Ka-band professional & military satellite communication systems (ground, SOTP, SOTM, maritime, etc.). Latest technology is applied to obtain the best noise figure, phase noise, gain stability and return losses according to MIL-STD-188-164C. The ACLNA-Ka family is a high reliability solution designed for harsh environmental conditions, with every single production unit fully tested in an environmental chamber and delivered with a complete factory acceptance test report.

RECEIVER SPECIFICATIONS

- **RF frequency**: 17.7 to 21.2 GHz
- **Input Ka-Band VSWR (50 Ω)**: < 1.5:1
- **Output Ka-band VSWR (50 Ω)**: < 1.8:1 (< 1.3:1 option LN3)
- **Max. input level without damage**: 0 dBm
- **Gain**: 50 dB min
- **Gain flatness**: ±1.25 dB over whole BW, ±0.5 dB over 500 MHz, ±0.15 dB over 40 MHz
- **Gain stability (24 hours)**: ±0.2 dB @ const. temp.
- **Gain variation over temperature**: ±1.5 dB
- **Noise figure @ 25 °C**: ≤ 1.6 dB
- **Noise temperature @ 25 °C**: ≤ 130 K
- **Output P1dB**: > +20 dBm
- **Output IP3**: > +30 dBm
- **Spurious**: < -70 dBc @ P_{OUT} = 0 dBm
- **AM/PM conversion**: > 0.1°/dB @ P_{OUT} = -10 dBm
- **Group delay over any 40 MHz**
  - Linear: 0.02 ns/MHz
  - Parabolic: 0.001 ns/MHz^2
  - Ripple: 0.1 ns pp

MECHANICAL SPECIFICATIONS

- **Size (LxWxH)**: 95 x 50 x 32 mm
- **Weight**: 270 g
- **Finish**: RAL 9003 (White)
- **Storage temperature**: -40 °C to +85 °C
- **Operating temperature**: -40 °C to +60 °C
- **Relative humidity**: up to 100%
- **Operating altitude**: up to 4500 m

ENVIRONMENTAL SPECIFICATIONS

- **RX input (Ka-Band)**: WR42 grooved (PBR 220)
- **RX output (Ka-Band)**: Type SMA(F) 50 Ω
- **Supply & Alarm contact closure**: NORCOMP M8/5 pins

INTERFACES

- **All mating connectors provided**

OPTIONS

- **LN3**: Coaxial output isolator

Any other frequency band or custom specification available under request. Please, contact factory. Specifications are subject to change without notice.

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