



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-188-164B**. 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 22.2 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 (60 dB min option LN1) |
| Gain flatness | ±1.5 dB over whole BW |
| | ±0.5 dB over 500 MHz |
| | ±0.2 dB over 40 MHz |
| Gain stability (24 hours)..... | ±0.2 dB @ const. temp. |
| Gain variation over temperature | ±2.5 dB (±1.5 dB option LN4) |
| Noise figure @ 25 °C | ≤ 1.8 dB |
| Noise temperature @ 25 °C | ≤ 150 K |
| Output P1dB | > +10 dBm (+20 dBm option LN2) |
| Output IP3 | > +20 dBm (+30 dBm option LN2) |
| Spurious | < -70 dBc @ P _{OUT} = 0 dBm |
| AM/PM conversion | > 0.1 dB/deg @ 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 |

POWER SUPPLY

| | |
|--|----------------------------|
| DC input voltage | 12-28 V _{DC} |
| Consumption @ 15 V _{DC} | 140 mA (200 mA option LN2) |

MECHANICAL SPECIFICATIONS

| | |
|-------------------|--------------------|
| Size (LxWxH)..... | 95 x 50 x 32 mm |
| | 3.7 x 2.0 x 1.3 in |
| Weight | 270 g |
| | 0.6 lbs |
| Finish | RAL 9003 (White) |

ENVIRONMENTAL SPECIFICATIONS

| | |
|----------------------------|------------------|
| 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 |

INTERFACES

| | |
|--------------------------------------|------------------------|
| 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 |

All mating connectors provided

OPTIONS

| | |
|-----------|-------------------------------|
| LN1 | High gain configuration |
| LN2 | High linearity configuration |
| LN3 | Coaxial output isolator |
| LN4 | Increased gain stability |
| LN5 | M&C through serial port RS485 |