



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 (See options)
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 <sub>OUT</sub> = 0 dBm
AM/PM conversion .....	> 0.1 °/dB @ P <sub>OUT</sub> = -10 dBm
Group delay over any 40 MHz	
Linear .....	0.02 ns/MHz
Parabolic .....	0.001 ns/MHz <sup>2</sup>
Ripple .....	0.1 ns pp

### POWER SUPPLY

DC input voltage .....	12-28 V <sub>DC</sub>
Consumption @ 15 V <sub>DC</sub> .....	200 mA typ

### 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

Ka-band output	Ka-band input	Standard freq. option
19.20 to 21.20 GHz	19.20 to 21.20 GHz	ACLNA-Ka-E11-V1
17.70 to 20.20 GHz	17.70 to 20.20 GHz	ACLNA-Ka-E84-V1
17.70 to 21.20 GHz	17.70 to 21.20 GHz	ACLNA-Ka-E33-V1

LN3 .....	Coaxial output isolator
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