



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 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
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	±1.5 dB
Noise figure @ 25 °C	≤ 1.8 dB
Noise temperature @ 25 °C	≤ 150 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

POWER SUPPLY

DC input voltage	12-28 V _{DC}
Consumption @ 15 V _{DC}	200 mA

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

LN3	Coaxial output isolator
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