

# Ka-BAND LOW NOISE BLOCK (LNB)

ACLNBD-Ka-E11-V3

Dual Band Series Simultaneous Outputs



Ed.01

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**ACLNBD-Ka Standard Series has been designed to meet restrictive specifications for Ka Band communication systems. The equipment has a typical gain of 60 dB with a noise figure lower than 1.6 dB, with low weight and dimensions. Single input and simultaneous output ports are provided so no channel selection is needed.**

**ACLNBD-Ka Standard Series has been tested over the specified temperature range, providing good gain stability with temperature and very high reliability.**

## RECEIVER SPECIFICATIONS

Input frequency .....	19.2 to 21.2 GHz
Input Ka-band VSWR (50 Ω) .....	< 1.3:1
Output frequency.....	950 to 2000 MHz (See options)
Output L-band VSWR (50 Ω).....	< 2.0:1
Spectrum inversion .....	None
Maximum input level without damage.....	0 dBm
Gain .....	> 60 dB
Gain flatness over the whole channel bandwidth .....	± 2.0 dB
Gain flatness over any 40 MHz.....	± 0.5 dB
Gain stability over 24 hours .....	± 0.25 dB @ constant temperature
Gain variation over temperature.....	± 1.5 dB over the whole range
Noise figure @ 25°C .....	≤ 1.6 dB (1.4 dB typ)
Image rejection.....	> 45 dB
Output P1dB .....	> +10 dBm
In-Band Spurious.....	< -60 dBc @ P <sub>OUT</sub> = 0 dBm
Output phase noise (IESS-308/309 – 5 dB)	
100 Hz .....	-65 dBc/Hz
1 kHz.....	-75 dBc/Hz
10 kHz .....	-85 dBc/Hz
100 kHz.....	-95 dBc/Hz
External reference (multiplexed on L-band output port 2) .....	10 MHz / 0 dBm ± 5 dB
DC input voltage (multiplexed on L-band output port 2) .....	12-18 V <sub>DC</sub>
DC current consumption @ 12 V <sub>DC</sub> .....	260 mA typ
Storage temperature .....	-40 to +85°C
Operating temperature.....	-20 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 1 (L-Band) .....	Type N(F) 50 Ω
RX output 2 (L-Band+DC+External Reference) .....	Type N(F) 50 Ω
Dimensions .....	130 x 70 x 40 mm / 5.1 x 2.7 x 1.6 inches
Weight .....	550 g / 1.2 lbs
Finish .....	RAL 9003 (White)

Ka-band input	L-band output	LO frequency	Standard frequency option
19.2 to 20.2 GHz (Band 1) 20.2 to 21.2 GHz (Band 2)	1000 to 2000 MHz (Rx 1) 1000 to 2000 MHz (Rx 2)	18.200 GHz (Path 1) 19.200 GHz (Path 2)	ACLNBD-Ka-E11-V3-0A
19.2 to 20.2 GHz (Band 1) 20.2 to 21.2 GHz (Band 2)	950 to 1950 MHz (Rx 1) 950 to 1950 MHz (Rx 2)	18.250 GHz (Path 1) 19.250 GHz (Path 2)	ACLNBD-Ka-E11-V3-0B

LN1: .....	RX output connector type SMA(F) 50 Ω
LN2: .....	Operating temperature -40 to +60°C
LN3: .....	Internal reference (ACLNBDI-Ka-E11-V3 freq. stability ±1 ppm)

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