

# Ka BAND LNB WideBand Series

ACLNBW-Ka-E33-V2



**ACLNBW-Ka Wideband 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 1.8 dB, with low weight and dimensions. Band selection is arranged by serial port dedicated connector or DC/22KHz Combination.**

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

## RECEIVER SPECIFICATIONS

Input Frequency .....	17.7 to 21.2GHz
Input Ka-band VSWR (50Ω) .....	<1.5:1
Output Frequency .....	1000 to 2000MHz
Output L-band VSWR (50Ω) .....	<2.0:1
Spectrum Inversion .....	None
Max Input level without damage .....	0dBm

## TRANSFER SPECIFICATIONS

Gain .....	>60dB
Gain Flatness over the whole channel bandwidth .....	±2.0dB
Gain flatness over any 40MHz .....	±0.5dB
Gain Stability over 24 hours .....	±0.25dB @ const. Temp.
Gain Stability over temperature .....	±1.5dB over the whole range
Noise figure @25°C .....	≤1.8dB (1.5dB typ.)
Image rejection .....	>40dB
Output P1dB .....	>+10dBm
In-Band Spurious .....	<-60dBc @Pout=0dBm
Output Phase noise (IESS-308/309 – 5dB)	
100Hz .....	-65dBc/Hz
1Kz .....	-75dBc/Hz
10KHz .....	-85dBc/Hz
100KHz .....	-95dBc/Hz
External reference (Mux on L-Band output port 2) .....	10MHz/ 0dBm ± 5dB

## POWER SUPPLY

DC Input Voltage (mux on L-band Output port 2) .....	12-18Vdc
DC Current Consumption @12Vdc .....	320 mA typ

## ENVIRONMENT

Storage Temperature .....	-40 to +85°C
Operating Temperature .....	-20 to +60°C
Relative humidity .....	up to 100%
Operating altitude .....	up to 4500m

## MECHANICAL

### Interfaces

RX input (Ka-band) .....	WR42 grooved
RX output-1 (L-Band+DC+Ext. Ref+22KHz optional) .....	Type N(F) 50Ω
M&C (Serial Port RS485) .....	MS3112E8-4S

Dimensions .....	120 x 60 x 40mm
	4.7 x 2.4 x 1.6 inches

Weight .....	450g/1.0lbs
Finish .....	RAL9003 (white)

## OPTIONS

LN1 .....	RX output connector type SMA (F) 50Ω
LN2 .....	Operating temp. -40 to +60°C
LN3 .....	Internal Ref (ACLNBWI-Ka-E33-V3 freq. stab. ±1ppm)
LN4 .....	Band Switching 13/18Vcc + 22KHz

Ka-band input	L-band output	LO frequency	Option LN4	Standard frequency option
17.7 to 18.2 GHz	1000 to 1500 MHz	16.7 GHz	13VDC	ACLNBW-Ka-E33-V2
18.2 to 19.2 GHz	1000 to 2000 MHz	17.2 GHz	13VDC + 22KHz	
19.2 to 20.2 GHz	1000 to 2000 MHz	18.2 GHz	18VDC	
20.2 to 21.2GHz	1000 to 2000 MHz	19.2 GHz	18VDC + 22KHz	

Based on ACORDE DATASHEET aclnbw-ka-e33-v2 Ed.09 from 05/10/16

