

Ka BAND LNB Ultra-WideBand Series

ACLNBW-Ka-E45-V2



ACLNBW-Ka Ultra-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.

ACLNBW-Ka Ultra-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 22.2GHz
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	250 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)	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-E45-V2 freq. stab. ±1ppm)

Ka-band input	L-band output	LO frequency	Standard frequency option
17.7 to 18.7 GHz	1000 to 2000 MHz	16.7 GHz	ACLNBW-Ka-E45-V2
18.7 to 19.7 GHz	1000 to 2000 MHz	17.7 GHz	
19.7 to 20.7 GHz	1000 to 2000 MHz	18.7 GHz	
20.7 to 21.7GHz	1000 to 2000 MHz	19.7 GHz	
21.7 to 22.2GHz	1500 to 2000 MHz	20.2 GHz	

Based on ACORDE DATASHEET aclnbw-ka-e45-v2 Ed.06 from 05/10/16

