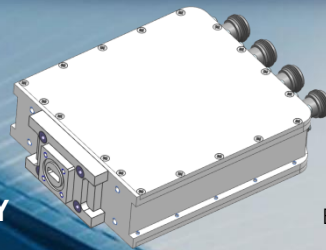


Ka-BAND LOW NOISE BLOCK (LNB)

ACLNBW-Ka-E45-V3

PRELIMINARY

Ultra-Wideband Series Simultaneous Outputs



Ed.01

05/10/16



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. Single input and simultaneous output ports are provided so no channel selection is needed.

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 22.2 GHz
Input Ka-band VSWR (50 Ω)	< 1.5:1
Output frequency.....	1000 to 2150 MHz
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	≤ 1.8 dB (1.6 dB typ)
Image rejection.....	> 40 dB
Output P1dB	> +10 dBm
In-Band Spurious.....	< -60 dBc @ Pout = 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 1)	10 MHz / 0 dBm ± 5 dB
DC input voltage (multiplexed on L-band output port 1)	12-18 V _{DC}
DC current consumption @ 12 V _{DC}	750 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+DC+External Reference)	Type N(F) 50 Ω
RX output 2/3/4 (L-Band).....	Type N(F) 50 Ω
Dimensions	140 x 115 x 40 mm / 5.5 x 4.5 x 1.6 inches (TBC)
Weight	950 g / 2.1 lbs (TBC)
Finish	RAL 9003 (White)

Ka-band input	L-band output	LO frequency	Output port	Standard frequency option
17.70 to 18.85 GHz	1000 to 2150 MHz	16.700 GHz	1	ACLNBW-Ka-E45-V3
18.85 to 20.00 GHz	1000 to 2150 MHz	17.850 GHz	2	
20.00 to 21.15 GHz	1000 to 2150 MHz	19.000 GHz	3	
21.15 to 22.20 GHz	1000 to 2050 MHz	20.150 GHz	4	

- LN1: RX output connector type SMA(F) 50 Ω
- LN2: Operating temperature -40 to +60°C
- LN3: Internal reference (ACLNBW-Ka-E45-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.