

Ka BAND LNB Standard Series

ACLNBS-Ka-Ex-V3



ACLNBS-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 1.5 dB, with low weight and dimensions.

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 22.2GHz (see options) |
| Input Ka-band VSWR (50Ω) | <1.3:1 |
| Output Frequency | 950 to 2000 MHz (see options) |
| Output L-band VSWR (50Ω) | <2.0:1 |
| Spectrum Inversion | None |
| Max Input level without damage | 0dBm |

TRANSFER SPECIFICATIONS

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|--|---------------------------|
| Gain | >60dB |
| Gain Flatness over the whole channel bandwidth | ±2dB |
| Gain Stability over 24 hours | ±0.25dB @ const. Temp. |
| Gain Stability over temperature | ±2dB over the whole range |
| Noise figure @25°C | ≤1.5dB |
| Image rejection | >45dB |
| 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) | 9-15Vdc |
| DC Current Consumption @12Vdc | 370 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 (L Band+DC+Ext. Ref) | Type N(F) 50Ω |
| Dimensions | 114 x 58x 36mm 4.5 x 2.3 x 1.4 in. |
| Weight | 350g/0.8lbs |
| Finish | RAL9003 (white) |

OPTIONS

| | |
|-----------|---|
| LN1 | RX output connector type SMA (F) 50Ω |
| LN2 | Operating temp. -40 to +60°C |
| LN3 | Internal Ref (ACLNBS-Ka-Ex-V3 freq. stab. ±1ppm) |

| Ka-band input | L-band output | LO frequency | Standard frequency option |
|------------------|------------------|--------------|---------------------------|
| 19.2 to 20.2GHz | 1000 to 2000 MHz | 18.2 GHz | ACLNBS-Ka-E1-V3 |
| 20.2 to 21.2GHz | 1000 to 2000 MHz | 19.2GHz | ACLNBS-Ka-E2-V3 |
| 20.2 to 21.2GHz | 950 to 1950 MHz | 19.25 GHz | ACLNBS-Ka-E22-V3 |
| 21.2 to 22.2 GHz | 1000 to 2000 MHz | 20.2 GHz | ACLNBS-Ka-E60-V3 |

Based on ACORDE DATASHEET aclnbs-ka-ex-v3 Ed.11 from 05/10/16

