



Professional Ka-Band PLL LNB with Low Phase Noise



The Ka-PLL LNB is a single-band LNB covering the wide frequency range 17.3-22.2 GHz with several sub bands and LO frequencies.

The LNB has a Low Phase Noise which is compliant to DVB-S2X Professional services.

The LNB has a compact size and light weight. It is designed for reliable operation over a high temperature range for installation in various outdoor environments or build-in applications.

Options include customized LO, customized gain, separate DC power input and separate input for the external 10 MHz reference.

Features

- Frequency range 17.3-22.2 GHz
- Several LO frequencies available
- Internal or external 10 MHz reference
- Low phase noise (DVB-S2X compliant)
- High P1dB and IP3
- Compact size and light weight
- High operating temperature range

TECHNICAL SPECIFICATIONS

MODEL:	16.35	16.75	17.20	17.25	18.20	18.25	18.75	19.20	19.25	20.20	20.25
Input freq. (GHz)	17.30-18.30	17.70-18.70	18.20-19.20	18.20-19.20	19.20-20.20	19.20-20.20	19.70-20.20	20.20-21.20	20.20-21.20	21.20-22.20	21.20-22.20
LO (GHz)	16.35	16.75	17.20	17.25	18.20	18.25	18.75	19.20	19.25	20.20	20.25
Output freq. (MHz)	950-1950	950-1950	1000-2000	950-1950	1000-2000	950-1950	950-1450	1000-2000	950-1950	1000-2000	950-1950
Gain	60 dB typ. (55 dB min.) <i>Option customized gain and variation</i>										
Gain flatness	±0.4 dB max. within 30 MHz ±2 dB max. over each band										
Noise Figure typ.	1.3 dB										1.5 dB
Phase Noise typ.	-40 dBc @ 10 Hz	-65 dBc @ 100 Hz	-85 dBc @ 1 kHz	-90 dBc @ 10 kHz	-95 dBc @ 100 kHz	-112 dBc @ >1 MHz					
Image rejection	30 dB min.										
Output P1 dB typ.	+15 dBm										
Output IP3 typ.	+25 dBm										
Output VSWR	2.1:1 typ.										
Output connector	F-type 75Ω / N-type 50Ω / SMA-type 50Ω										
Input	Waveguide WR 42 / R 220. Flange PBR 220.										
Input VSWR	2.3:1 typ. <i>Option 1.4:1 max. with waveguide isolator</i>										
LO leakage	-60 dBm @ waveguide input										
Internal ref. stability	±1 ppm -40 to +60°C (±1.5 ppm -40 to +80°C) / ±2.5 ppm -40 to +60°C (±3.5 ppm -40 to +80°C)										
External 10 MHz ref	Level: -15 to +5 dBm. Supplied through output connector (no ext. 10 MHz ref. present -20 ppm)										
DC	+12 to +24 V (LO 18.75 GHz +13 to +24 V) Supplied through output connector <i>Option separate DC input connector F-, N- or SMA-type</i>										
Power typ.	5 W										
Temperature range	-40 to +80°C										
Dimensions	121 x 56 x 44 mm (F- & SMA-connector)					127 x 56 x 44 mm (N-connector)					
Weight	326 g (F- & SMA-connector)					345 g (N-connector)					
Options	Customized LO, gain & variation, separate DC input, separate 10 MHz ref. input.										

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