

Wideband PLL LNB



Wideband, extended IF output
Simultaneous reception
2 GHz of the Ka-Band

The Wideband output LNB supports reception of wide range of Ka-Band with 1 LO and extended IF output 950 - 2950 MHz.

The LNB features Low Phase Noise to meet the DVB-S2X Professional Services profile. Ideal for installation in various applications with Low Symbol Rate carriers including HTS.



Features

- Custom Frequency ranges within 17.70-22.20 GHz
- Wide Ka-Band coverage with 1 LO and 1 output
- Standard Ultra Low Phase Noise meets all profiles of DVB-S2X
- High P1dB and IP3
- Choose between Internal Ref. or External Ref. input models
- Compact size and light weight
- Wide operating temperature range
- Low gain option

TECHNICAL SPECIFICATIONS

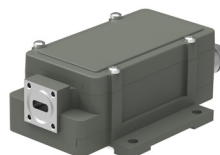
MODEL:	LNB 16.75 GHz	LNB 18.25 GHz
Input Frequency	17.70 - 19.70 GHz	19.20 - 21.20 GHz
LO Frequency	16.75 GHz	18.25 GHz
Output Frequency	950 - 2950 MHz	
Gain	60 dB typ. (55 dB min.)	
Flatness	±0.4 dB max. within 30 MHz, ±3 dB max. full band	
Noise Figure / Noise Temperature	1.3 dB / 101 K typ.	1.4 dB / 110 K typ.
Phase Noise	-40 dBc @ 10 Hz -65 dBc @ 100 Hz -85 dBc @ 1 kHz -90 dBc @ 10 kHz -95 dBc @ 100 kHz -112 dBc @ ≥1 MHz typ.	
Image Rejection	30 dB min.	
Output P1dB	+15 dBm typ.	
Output IP3	+25 dBm typ.	
Output VSWR	2.0:1 typ.	
Output Connector	N-type 50Ω Option SMA-type 50Ω	
Input Waveguide	WR 42 / R 220. Flange PBR 220	
Input VSWR LNB	2.3:1 typ., 1.35:1 max. with optional Low Loss Isolator	
LO Leakage	-60 dBm @ waveguide input	
MODELS with Internal Reference	±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)	
MODELS with External 10 MHz Reference	Sine Wave, Level: -10 to +10 dBm. Supplied through output connector (with no ext. 10 MHz ref. present LO shifts -20 ppm)	
DC Input	+12 to +24 V Supplied through output connector	
Power Consumption	5 W typ.	
Temperature Range	Storage and operating: - 40° to + 80° C	
Dimensions	121 x 56 x 44 mm (SMA-connectors), 127 x 56 x 44 mm (N-connectors), for drawing, see www.smw.se	
Weight	326 g (F- & SMA-connectors), 345 g (N-connectors)	
Miscellaneous	Enclosed conductive O-ring, mounting screws (M3 x 8) 4pcs	
Options	Customized LO, gain & variation, separate DC input, separate 10 MHz ref. input, Waveguide Isolator (input VSWR 1.35:1 max), Pressurizable	
SEE THE RF OVER FIBER AND L-BAND SECTIONS FOR OUTPUT OPTIONS		

Specifications are subject to change without notice. Products from Swedish Microwave AB are made for commercial use.

Rev.11-20-5G



Optional Low loss isolator



Optional enclosure fixing points