Wideband PLL LNB



Wideband, extended IF, output PLL LNB for simultaneous reception of full Ku-Band



Optional Low loss isolator

The Wideband output LNB supports reception of full Ku-Band with 1 LO and 1 Extended IF Output 950-3000 MHz, 950-2750 MHz or 290 - 2340 MHz.

Features

- Full Ku-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
- Available as TWIN for H/V reception
- 10.41 model acc. to ASTRA Wideband spec.
- Lower gain versions for larger antennas
- Wide operating temperature range

The Ultra Low Phase Noise "ULPN" is recommended* for:

DVB-S2: - Narrowband 8PSK 8/9 and 9/10 FEC

- 16 APSK or higher modulation type (any bandwidth)

- All applications with "Pilot Off"

DVB-S2X: All "MODCODS" and symbol rates NS3/NS4: All "MODCODS" and symbol rates

* Please note that these are general recommendations and that all other system components also will influence system performance.

TECHNICAL SPECIFICATIONS

MODEL:	9.75 GHz Wideband	10.00 GHz Wideband	10.41 GHz Wideband
Input Frequency	10.70 - 12.75 GHz	10.95 - 12.75 GHz	10.70 - 12.75 GHz
LO Frequency	9.75 GHz	10.00 GHz	10.41 GHz
Output Frequency	950 - 3000 MHz	950 - 2750 MHz	290 - 2340 MHz
Gain	60 dB typ., (55 dB min)		
Flatness	±0.4dB max. in 30 MHz, ±3 dB max. over band		
Noise Figure / Noise Temperature	0.8 dB / 59 K typ.		
Phase Noise typ.	-35 dBc @ 10 Hz -65 dBc @ 100	Hz -82 dBc @ 1 kHz -94 dBc @ 10 kHz	-98 dBc @ 100 kHz -120 dBc @ ≥1MHz, typ.
Image Rejection	40 dB min.		
Output P1dB	+15 dBm typ.		
Output IP3	+25 dBm typ.		
Output VSWR	2.1:1 typ.		
Output Connector	N-type 50Ω / SMA-type 50Ω / SMA-type 50Ω / F-type 75Ω		
Input Waveguide	WR 75 / R 120. Flange PBR 120		
Input VSWR	2.3:1 typ., with optional isolator 1.25:1 max.		
LO Leakage	-60 dBm @ waveguide input		
MODELS with Internal Reference	±10 kHz -20 to +70°C (±15 kHz -40 to +80°C)		
MODELS with External 10 MHz Reference	Sine Wave, Level: -10 to +10 dBm. Supplied through the output connector (with no ext. 10 MHz ref. present LO shifts -20 ppm)		
DC Input	+15 to +26 V supplied through output connector.		
Current Drain	160 mA @ +20 V 180 mA @ +18 V 200 mA @ +16 V		
Temperature Range	Storage and operating: -40 to +80°C		
Dimensions	128 x 57 x 46 mm (N-connector), for drawing, see <u>www.smw.se</u>		
Weight	329 g (SMA-connector), 345 g (N-connector)		
Options	Customized LO, Lower gain and variation, Separate DC input connector F-, N- or SMA-type, 10 MHz ref. input connector (SMA, F or N), Twin-LNB with OMT + bend and protecting cover, Pressurizable 0.1 bar max.		
Miscellaneous	Enclosed conductive O-ring, mounting screws (M4 x 10) 4 pcs.		
SEE THE RF OVER FIBER AND L-BAND SECTIONS FOR OUTPUT OPTIONS			

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

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