



X-Band LNB Satcom & TLT

X-Band PLL LNB with integrated filters. For band 7.25-7.75 GHz or 7.9-8.4 GHz



The professional X-Band PLL LNB comes standard with Low Phase Noise to meet DVB-S2X Professional services. The LNB features VERY LOW input VSWR to avoid the need of an external isolator.

The LNB has built-in filtering for improved TX margin, High IP3 and Low power consumption. The compact size and light weight allows installation in various professional applications.

Features

- Wide frequency range
- Low phase noise
- High P1dB and IP3
- Choose between Internal Ref. or External Ref. input models
- Compact size and light weight
- Wide operating temperature range
- Option customized gain and LO

TECHNICAL SPECIFICATIONS

MODEL:	X-PLL 6.30		X-PLL 6.80		X-PLL 6.95 (MONITORING)	
Input Frequency	7.25 – 7.75 GHz		7.75 - 8.50 GHz		7.90 – 8.40 GHz	
LO Frequency	6.30 GHz		6.80 GHz		6.95 GHz	
Output Frequency	950 – 1450 MHz		950 – 1700 MHz		950 - 1450 MHz	
Gain	60 dB typ. (55 dB min.)				0 dB or by request.	
Flatness	±0.4 dB max. within 30 MHz, ±2 dB max. over band					
Noise Figure / Noise Temperature	0.69 dB / 50 K max. (0.6 dB / 43 K typ.)				19.9 dB / 28000 K @ Gain 0 dB max.	
Phase Noise	-35 dBc @ 10 Hz	-65 dBc @ 100 Hz	-85 dBc @ 1 kHz	-90 dBc @ 10 kHz	-100 dBc @ 100 kHz	-128 dBc @ ≥1 MHz, typ.
Image Rejection	60 dB min.					
Output P1dB	+15 dBm				+5 dBm	
Output IP3	+25 dBm				+15 dBm	
Output VSWR	1.7:1 max. @ 50Ω					
Output Connector	F-type 75Ω / N-type 50Ω / SMA-type 50Ω					
Input Waveguide	WR 112 / R 84. Flange PBR 84					
Input VSWR	1.5:1 max.					
LO Leakage	-60 dBm @ waveguide input max.					
Internal Ref. Stability	±0.5 ppm -20 to +70°C (±1 ppm -40 to +80°C) ±1 ppm -20 to +70°C (±1.5 ppm -40 to +80°C)					
External 10 MHz Ref.	Level: -15 to +5 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					
Current Drain	190 mA @ +13 V	160 mA @ +15 V	140 mA @ +18 V	110 mA @ +24 V		
Temperature Range	-40 to +80°C					
Filtering (internal)	15 dB @ 7.9 GHz 40 dB @ 8.1 GHz >60 dB @ 8.3 - 8.4 GHz	30 dB @ 8.0 GHz 50 dB @ 8.2 GHz				
Dimensions	130 x 56 x 51 mm (F- & SMA-connector)		135 x 56 x 51 mm (N-connector) (for drawing, see www.smw.se)			
Weight	353 g WR112, 420 g CPR112G (F- & SMA-connector)		369 g WR112, 446 g CPR112G (N-connector)			
Options	CPR 112G flange adaptor, Customized gain, LO & variation, Separate DC input connector F- N- or SMA-type, Separate 10 MHz ref. input. Fiber output (Q-ODC)					
Miscellaneous	Enclosed O-ring, mounting screws (M4 x 10) 4 pcs.					