

PLL LNB Satcom & TLT

Professional LNB for Rx reception & Tx monitoring with optional fiber optic output



With optional
CPR 112G adapter




With optional direct fiberoptic output

Features

- Very Low Noise Figure
- Excellent Input VSWR
- Low phase noise meets DVB-S2X VSAT profile
- High P1dB and IP3
- Choose between Internal Ref. or External Ref. input models
- Lower gain versions for larger antennas
- Wide operating temperature range
- Optional direct fiberoptic output
- Internal Filtering (LO 6.30)

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 - 8.50 GHz
LO Frequency	6.30 GHz	6.80 GHz	6.95 GHz
Output Frequency	950 - 1450 MHz	950 - 1700 MHz	950 - 1550 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.)		19.90 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.	40 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, optional direct fiberoptic output through Q-ODC connector		
Input Waveguide	WR 112 / R 84. Flange PBR 84		
Input VSWR	1.5:1 max.		
LO Leakage	-60 dBm max. @ waveguide input		
MODELS with Internal Reference	±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)		
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		
Current Drain	190 mA @ +13 V	160 mA @ +15 V 140 mA @ +18 V	110 mA @ +24 V
Temperature Range	Storage and operating: -40 to +80°C		
Filtering (internal) Provides isolation from interfering signals.	15 dB @ 7.9 GHz 30 dB @ 8.0 GHz 40 dB @ 8.1 GHz 50 dB @ 8.2 GHz >60 dB @ 8.3 - 8.4 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 LO, lower gain and variation, Separate DC input connector F- N- or SMA-type, Separate 10 MHz ref. input., Pressurizable (n/a with optical output)		
Miscellaneous	Enclosed conductive O-ring, mounting screws (M4 x 10) 4 pcs.		
OPTIONAL RF OVER FIBER OUTPUT			
Optical output	Direct modulated DFB, 2 mW @ 1310 nm, Dual fiber, Single mode Huber & Suhner, Q-ODC		
RF monitor / DC input	F-type 75Ω / N-type 50Ω / SMA-type 50Ω. RF monitor port 45 dB gain.		
DC Input	Via monitor connector, Voltage see above, 6 W max.		
Dimensions	137 x 63 x 56 mm, for drawing, see www.smw.se		
Weight	480 g (SMA and F connectors), 520 g (N connector)		
Temperature range	Storage and operating: -40 to +70° C		
Standards compliance	Optical interface: EIA/TIA 568, ITU std. G694.2; EMC: EN 55013:2013, EN 55020, EN 300 386; Safety: EN 60950-1, EN 60950-22, EN 60065:2002		
Options	Fixed gain (Beacon), 1550 nm fiber transmitter		

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Above parameters are generic product family values. For part number specific min./max. values, please consult us.

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