Fiber output PLL LNB for Satcom and EO



X-Band Fiber output PLL LNB The professional X-Band PLL fiber LNB gives improvement when distance between LNB and receiver becomes too long for traditional coaxial cable or when the requirements for kept high C/N is an important topic. For more details, please contact us.

The Satcom LNB 6.30, has some built-in filtering for improved TX margin, High IP3 (with our fiber receiver) 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 out RF via Fiber receiver
- Choose between Internal Ref. or External Ref. input models
- Compact size and light weight
- Wide operating temperature range
- Option, separate DC / 10 MHz ref. input
- Directly compatible with SMW Quattro and Versa Link fiber receivers and compatible with a wide range of RF over fiber receivers on the market.

TECHNICAL SPECIFICATIONS

MODEL:	X-PLL 6.30, Satcom	X-PLL 6.95, Satcom TX	X-PLL 6.80, Earth Observation
Input Frequency	7.25 – 7.75 GHz	7.90 - 8.40 GHz	7.75 – 8.50 GHz
LO Frequency	6.30 GHz	6.95 GHz	6.80 GHz
Output Frequency (Fiber Rx)	950 – 1450 MHz	950 – 1450 MHz	950 – 1700 MHz
Optical Output	Direct modulated DFB, 2 mW @ 1310 nm		
Conversation Gain	60 dB typ.		
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.)		
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.
Internal Ref. Stability	±0.5 ppm -20 to +70°C (±1 ppm -40 to +70°C) ±1 ppm -20 to +70°C (±1.5 ppm -40 to +70°C)		
External 10 MHz Ref.	Level: -15 to +5 dBm. Supplied through separate connector (with no ext. 10 MHz ref. present LO shifts -20 ppm)		
Input IP3	-35 dBm typ.		
Fiber Output Connector	Dual fiber, Single mode Huber & Suhner, Q-ODC		
Input Waveguide	WR 112 / R 84. Flange PBR 84.		
Input IP3	-35 dBm typ.		
Input VSWR	1.5:1 max.		
RF / DC Connector	F-type 75 Ω / N-type 50 Ω / SMA-type 50 Ω . RF monitor port 45 dB gain.		
DC Input	+12 to +26 V Supplied through RF monitor output connector		
Current Drain	240 mA @ +1	2 V, 210 mA @ +15 V, 170 mA @ +18 V	, 135 mA @ +24 V
Power Consumption	6 W max.		
Temperature Range	Storage and operating: -40 to +70° C		
Dimensions	137 x 63 x 56 mm		
Weight	480 g (SMA and F connectors), 520 g (N connector)		
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, CPR 112G flange adaptor, Separate DC input connector F-, N- or SMA-type, Other output frequencies on request.		
Miscellaneous	Enclosed conductive O-ring, mounting screws (M4 x 10) 4 pcs.		
Accessories	Outdoor to Outdoor fiber cables (Q-ODC to Q-ODC), Outdoor to indoor patch cables (different connector type and lengths), External 10 MHz ref. oscillator, Dual DC Inserter, Power Supply Unit (AC to DC)		

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