



Fiber output Ka-Band 2-Band LNB

Professional 2-Band Fiber LNB



DVBS2X

The Ka-Band Fiber PLL LNB is a 2-Band LNB that covers the wide frequency range 17.75-22.2 GHz with several sub-bands and LO frequencies.

Up to 20 km standard 1310 nm (optional up to 40 km with 1550 nm) single mode fiber cable distance, depending on link budget with very high C/N maintained.

Options include customized LO, customized gain, separate DC power input and separate input for the external 10 MHz reference.

Features

- Frequency range 17.3-22.2 GHz
- Several LO frequencies available
- Choose between Internal Ref. or External Ref. input models
- Ultra Low Phase Noise
- High P1dB and IP3 out RF via Fiber receiver
- Compact size and light weight
- Wide operating temperature range
- 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:		16.80 / 17.40	17.20 / 18.20	17.25 / 18.25	17.45 / 18.25	18.20 / 19.20	18.25 / 19.25	19.20 / 20.20	19.25 / 20.25
Input Frequency	Band 1	17.75 - 18.75 GHz	18.20 - 19.20 GHz	18.20 - 19.20 GHz	18.40 - 19.20 GHz	19.20 - 20.20 GHz	19.20 - 20.20 GHz	20.20 - 21.20 GHz	20.20 - 21.20 GHz
	Band 2	18.35 - 19.35 GHz	19.20 - 20.20 GHz	19.20 - 20.20 GHz	19.20 - 20.20 GHz	20.20 - 21.20 GHz	20.20 - 21.20 GHz	21.20 - 22.20 GHz	21.20 - 22.20 GHz
LO Frequency	Band 1/2	16.80 / 17.40 GHz	17.20 / 18.20 GHz	17.25 / 18.25 GHz	17.45 / 18.25 GHz	18.20 / 19.20 GHz	18.25 / 19.25 GHz	19.20 / 20.20 GHz	19.25 / 20.25 GHz
Output Frequency (Fiber Rx)	Band 1	950 - 1950 MHz	1000 - 2000 MHz	950 - 1950 MHz	950 - 1750 MHz	1000 - 2000 MHz	950 - 1950 MHz	1000 - 2000 MHz	950 - 1950 MHz
	Band 2	950 - 1950 MHz	1000 - 2000 MHz	950 - 1950 MHz	950 - 1950 MHz	1000 - 2000 MHz	950 - 1950 MHz	1000 - 2000 MHz	950 - 1950 MHz
Switching Voltage	Band 1	13 V (12.0 - 14.0 V)							
	Band 2	18 V (16.0 - 19.0 V)							
Optical Output	Direct modulated DFB, 2 mW @ 1310 nm								
Conversion Gain	60 dB typ.								
Flatness	±0.4 dB max. within 30 MHz ±3 dB max. over each band								
Noise Figure	1.3 dB typ.								1.5 dB 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.								
Internal Ref. Stability	± 1 ppm @ -40° to +60° C, ± 1.5 ppm @ -40° to +70° C								
External 10 MHz Ref.	Level -15 to +5 dBm, supplied through the High band connector (with no ext. 10 MHz ref. present LO shifts -20 ppm)								
Input IP3	-35 dBm typ.								
Input VSWR	2.1:1								
Input Waveguide	WR 42, R 220 / PBR 220								
Output Fiber Connector	Dual fiber, Single mode Huber & Suhner, Q-ODC								
RF / DC Connector	F-type 75Ω / N-type 50Ω Option SMA-type 50Ω. RF monitor ports 45 dB gain.								
DC Input	See switching voltage above, The DC supply is fed via one or both RF monitor ports								
Power Consumption	6 W max.								
Temperature Range	-40° to +70° C								
Dimensions	129 x 63 x 56 mm (for drawing, see www.smw.se)								
Weight	460 g (F & SMA connector), 500 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 (increased distance), Switching voltage via separate connector								
Miscellaneous	Enclosed O-ring, mounting screws (M3 x 8) 4pcs.								
Accessories	Outdoor to Outdoor fiber cables, Outdoor to indoor patch cables (different connector type and lengths), External 10 MHz ref. oscillator, Dual DC Inserter, Power Supply Unit (AC to DC), Outdoor enclosure								