



Fiber output Ka-Band LNB

Professional Single Band Fiber LNB



DVBS2X

The Ka-band Fiber PLL LNB is a single-band LNB that covers the wide frequency range 17.3-22.2 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 SPECIFICATION

MODEL:	16.35	16.75	17.20	17.25	18.20	18.25	18.75	19.20	19.25	20.20	20.25	20.45
Input Frequency	17.30-18.30 GHz	17.70-18.70 GHz	18.20-19.20 GHz	18.20-19.20 GHz	19.20-20.20 GHz	19.20-20.20 GHz	19.70-20.20 GHz	20.20-21.20 GHz	20.20-21.20 GHz	21.20-22.20 GHz	21.20-22.20 GHz	21.40-22.20 GHz
LO Frequency	16.35 GHz	16.75 GHz	17.20 GHz	17.25 GHz	18.20 GHz	18.25 GHz	18.75 GHz	19.20 GHz	19.25 GHz	20.20 GHz	20.25 GHz	20.45 GHz
Output Frequency (Fiber Rx)	950-1950 MHz	950-1950 MHz	1000-2000 MHz	950-1950 MHz	1000-2000 MHz	950-1950 MHz	950-1450 MHz	1000-2000 MHz	950-1950 MHz	1000-2000 MHz	950-1950 MHz	950-1700 MHz
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 / Noise Temperature	1.3 dB / 101 K typ.									1.5 dB / 120 K 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 separate connector (with no ext. 10 MHz ref. present LO shifts -20 ppm)											
Input IP3	-35 dBm typ.											
Input VSWR	2.1:1 typ.											
Input Waveguide	WR 42 / R 220, Flange PBR 220											
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 port 45 dB gain.											
DC Input	+12 to +24 V, The DC supply is fed via the RF monitor port						+13 to +24 V, The DC supply is fed via the RF monitor port					
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)											
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											