

## Dual Fiber PLL LNB



Dual Fiber output  
PLL LNB



**DVBS2**

**DVBS2X**

### Highest RF and optical performance

Single frequency conversion and directly modulated DFB lasers results in best possible performance.

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

Perfect for applications where professional fiber distribution from an antenna is needed but space and/or budget is limited.

### Features

- **Directly compatible with SMW Quattro and Versa Link Fiber receivers and compatible with a wide range of RF over Fiber receivers on the market.**
- **Ultra-low phase noise model meets all profiles of DVB-S2X**
- **Choose between Internal Ref. or External Ref. input models**
- **Small size and low power consumption**
- **AGC - Automatic Gain Control (Option: Fixed Gain for large antennas and Beacon)**
- **RF monitor and DC supply via RF connectors.**
- **Cost effective compared to running a separate fiber transmitter to a RF output LNB**
- **High P1dB and IP3 out RF via Fiber receiver**
- **Wide operating temperature range**

### TECHNICAL SPECIFICATIONS

MODEL:	WDFL-PLL LNB Type E		WDFL-PLL LNB Type B	
Frequency Band	Low band	High band	Low band	High band
Input Frequency	10.70 - 11.70 GHz	11.70 - 12.75 GHz	10.95 - 11.70 GHz	11.70 - 12.75 GHz
LO Frequency	9.75 GHz	10.60 GHz	10.00 GHz	10.75 GHz
Output Frequency (Fiber Rx)	950 - 1950 MHz	1100 - 2150 MHz	950 - 1700 MHz	950 - 2000 MHz
Optical Output	Direct modulated DFB, 2 mW @ 1310 nm			
Conversion Gain	60 dB typ.			
Flatness	±0.25 dB max. within 30 MHz		±2 dB max. each band	
Noise Figure / Noise Temperature	0.9 dB / 67 K typ.			
Phase Noise ULPN (std)	-35 dBc @ 10 Hz	-65 dBc @ 100 Hz	-82 dBc @ 1 kHz	-94 dBc @ 10 kHz
MODELS with Internal Reference	± 1 ppm @ -20° to +70° C, ± 1.5 ppm @ -40° to +70° C			
MODELS with 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	1.3:1 with isolator max., 2.3:1 w/o isolator max.			
Input Waveguide	WR 75 / R 120, Flange PBR 120			
Fiber Output Connector	Q-ODC , Dual fiber, Single mode Huber & Suhner			
RF / DC Connector	F-type 75Ω / N-type 50Ω Option SMA-type 50Ω. RF monitor ports 45 dB gain.			
DC Input / LNB	Type E +12 to +26 V, type B and with option ULPN +15 to +26 V. The DC supply is fed via one or both RF monitor port			
Current Drain / LNB	475 mA @ 12 V, 380 mA @ 15 V, 310 mA @ 18 V, 240 mA @ 24 V			
Power Consumption / LNB	6 W max.			
Temperature range	Storage and operating: - 40° to + 70° C			
Dimensions	205 x 152 x 83 mm			
Weight	520 g (SMA and F connector), 560 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.			
Miscellaneous	Enclosed conductive O-ring, mounting screw (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), Outdoor enclosure			

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