Quattro Fiber PLL LNB



Quattro Fiber output PLL LNB





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
- 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			
Conversation 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.			
Cross Polarisation	31,5 dB min.			
Phase Noise ULPN (std)	-35 dBc @ 10 Hz -65 dBc @ 100 Hz -82 dBc @ 1 kHz -94 dBc @ 10 kHz -98 dBc @ 100 kHz -120 dBc @ >1MHz, typ.			
MODELS with Internal Reference	± 1 ppm @ -20° to +70° C, ± 1.5 ppm @ -40° to +70° C			
MODELS with External 10 MHz Ref.	Level -10 to +10 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	2.3:1 typ.			
Input Waveguide	C120 (circular 18 mm)			
Fiber Output Connector	Q-ODC , Dual fiber, Single mode Huber & Suhner			
RF / DC Connector	F-type 75 Ω / N-type 50 Ω Option SMA-type 50 Ω . RF monitor ports 45 dB gain.			
DC Input / LNB	+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	1162 g (SMA and F connector), 1231 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)			

 $Specifications \ are \ subject \ to \ change \ without \ notice. \ Products \ from \ Swedish \ Microwave \ AB \ are \ made for \ commercial \ use.$

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