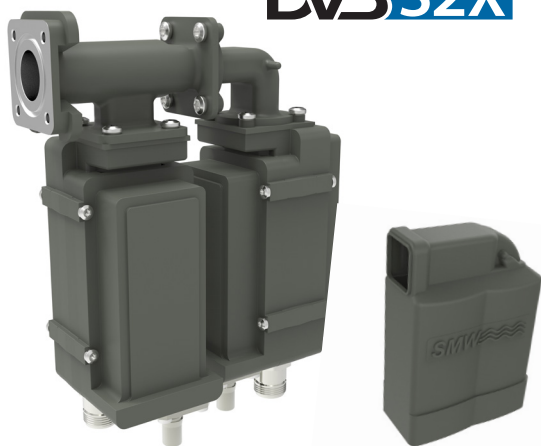


Quattro Fiber PLL LNB

Quattro 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**
- **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. | | | |
| 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 |
| 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 75Ω / N-type 50Ω Option SMA-type 50Ω. 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) | | | |

Rev.12-21-2D

Above parameters are generic product family values. For part number specific min./max. values, please consult us.

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