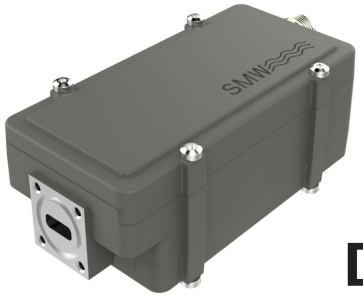
Single band PLL LNB

SMW SWEDISH MICROWAVE AB



DVB S2X

Features

- *Frequency range 17.30-22.20 GHz*
- *Model 16.35 E for DBS Uplink monitoring*
- *Models with Internal Ref. and models with External 10 MHz Ref.*
- *Standard Ultra Low Phase Noise meets all profiles of DVB-S2X*
- *High P1dB and IP3*
- *Compact size and light weight*
- *Wide operating temperature range*

TECHNICAL SPECIFICATIONS

MODEL:	16.35	16.35 E	16.75	17.20	17.25	18.20	18.25	18.75	19.20	19.25	20.20	20.25
Input Frequency	17.30-18.30 GHz	17.30-18.40 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
LO Frequency	16.35 GHz	16.35	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
Output Frequency	950-1950 MHz	950-2050 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
Gain	60 dB typ. (55 dB min.)											
Flatness	±0.4 dB max. within 30 MHz, ±2 dB max. over band											
Noise Figure / Noise Temperature	1.3 dB / 101 K typ.								1.4 dB / 110 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.											
Image Rejection	30 dB min.											
Output P1dB	+15 dBm typ.											
Output IP3	+25 dBm typ.											
Output VSWR	2.0:1 typ.											
Output Connector	F-type 75Ω / N-type 50Ω Option SMA-type 50Ω											
Input Waveguide	WR 42 / R 220. Flange PBR 220.											
Input VSWR	2.3:1 typ., 1.35:1 max. with optional Low Loss Isolator											
LO Leakage	-60 dBm @ waveguide input											
MODELS with Internal Reference	±1 ppm -40 to +60°C (±1.5 ppm -40 to +80°C), ±2.5 ppm -40 to +60°C (±3.5 ppm -40 to +80°C)											
MODELS with External 10 MHz Reference	Sine Wave, Level: -15 to +5 dBm. Supplied through output connector (with no ext. 10 MHz ref. present LO shifts -20 ppm)											
DC Input	+12 to +24 V, Supplied through output connector							+13 to +24 V @ LO ≥18.75 GHz. Supplied through output connector				
Power Consumption	5 W typ.											
Temperature Range	-40 to +80°C											
Dimensions	121 x 56 x 44 mm (F- & SMA-connector), 127 x 56 x 44 mm (N-connector), for drawing, see www.smw.se											
Weight	326 g (F- & SMA-connector), 345 g (N-connector)											
Miscellaneous	Enclosed O-ring, mounting screws (M3 x 8) 4pcs.											
Options	Customized LO, gain & variation, Separate DC input, Separate 10 MHz ref. input, Waveguide Isolator (input VSWR 1.25:1 max), Separate DC input connector F-, N- or SMA-type, enclosure fixing points, Pressurizable (n/a with optical output)											

OPTIONAL RF OVER FIBER OUTPUT	
Optical output	Direct modulated DFB, 2 mW @ 1310 nm, Dual fiber, Single mode Huber & Suhner, Q-ODC
RF monitor / DC input	F-type 75Ω / N-type 50Ω / SMA-type 50Ω. RF monitor port 45 dB gain.
DC Input	Via monitor connector, Voltage see above, 6 W max.
Dimensions	129 x 63 x 56 mm, for drawing, see www.smw.se
Weight	460 g (SMA and F connectors), 500 g (N connector)
Temperature range	-40 to +70° C
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

Rev.07-20-6G

Optional Low loss isolator

Optional enclosure fixing points

Optional fiberoptic enclosure

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.

Swedish Microwave AB, Dynamov. 5, S-591 61 Motala, Sweden. Tel: +46 141 216135, sales@smw.se, www.smw.se