

## For Rx and Monitoring



The X-Band PLL is ideal for Marine-, SNG-, VSAT and SATCOM On-The-Move applications and Rx monitoring.

Built-in filter, High IP3, Low Phase Noise and Low power consumption is included as standard. It's small and has low weight. Comes either with internal high LO stability or with external 10 MHz reference.

All our LNBS are individually hand tuned to get the very best performance available for each unit. Quality and long term reliability is also essential. Therefore are all LNBS tested according to a very extensive test program, which includes heating, cooling, water-proof testing and rigorous electrical testing.

Swedish Microwave was founded 1986 and is today a leading manufacturer of professional LNBS (Low Noise Block converters). The company is located in Motala Sweden, and to date the products are installed in more than 100 countries.

All work is in-house allowing custom-design products, short delivery times, high flexibility, quick service and support.

## SPECIFICATION SMW X-Band PLL LNB

Frequency range	<b>Rx</b> 7.25 - 7.75 GHz	<b>Rx and monitoring</b> 7.90 - 8.40 GHz
LO frequency	6.30 GHz	6.95 GHz
Gain typ.	58 dB (53 dB min.)	50 dB (45 dB min.) or 0 dB
IF Frequency	950-1450 MHz	950-1450 MHz
Gain variation within 30 MHz max.	±0.4 dB	±0.4 dB
Gain variation over band max.	±2 dB	±3 dB
Noise Figure, typ.	0.8 dB (1.0 dB max.)	1.0 dB (1.2 dB max.)
LO radiation	-60 dBm	-60 dBm
Image rejection	60 dB min	60 dB min
P1dB typ.	+15 dBm	+10 dBm
IP3 typ.	+25 dBm	+20 dBm
Input	WR112 or CPR112G (with adapter)	WR112 or CPR112G (with adapter)
Output (waterproof)	N-connector 50 ohm, SMA-connector 50 ohm or F-connector 75 ohm	N-connector 50 ohm, SMA-connector 50 ohm or F-connector 75 ohm
Input VSWR	2.0:1 max	2.5:1 max
Output VSWR	2.0:1 max	2.0:1 max
Operating temperature	-40 to +80 °C	-40 to +80 °C
Storage temperature	-40 to +80 °C	-40 to +80 °C
Dimensions	135 x 56 x 51 mm	135 x 56 x 51 mm
Weight	363 g	363 g
DC	+12 to +24 VDC	+12 to +24 VDC
Current typ.	260 mA @ +13 VDC 240 mA @ +15 VDC 200 mA @ +18 VDC 170 mA @ +24 VDC	260 mA @ +13 VDC 240 mA @ +15 VDC 200 mA @ +18 VDC 170 mA @ +24 VDC
Filtering, built-in	15 dB @ 7.9 GHz 30 dB @ 8.0 GHz 40 dB @ 8.1 GHz 50 dB @ 8.2 GHz >60 dB @ 8.3-8.4 GHz	

### Internal reference

LO stability*	±1 ppm or 2.5 ppm
LO Phase noise typical	-85 dBc @ 1 kHz -90 dBc @ 10 kHz -95 dBc @ 100 kHz -120 dBc @ >1 MHz

### External 10 MHz reference

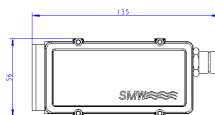
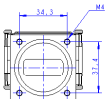
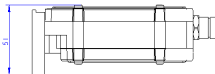
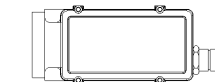
LO stability	Depend on the external reference
External reference input frequency	10 MHz
External reference input power	-5 to +10 dBm
External reference input port	Output IF connector. Option via sep. connector (SMA, N or F)
LO Phase noise typical	-70 dBc @ 10 Hz -70 dBc @ 100 Hz -85 dBc @ 1 kHz -90 dBc @ 10 kHz -95 dBc @ 100 kHz
External Reference Phase noise	-135 dBc @ 100 Hz -143 dBc @ 1 kHz -145 dBc @ 10 kHz

### Options

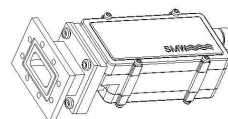
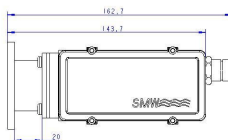
Separate DC power input (SMA, N or F)  
Customized gain and variation  
Customized LO frequency  
Separate input connector for the ext. 10 MHz ref.

### Enclosed accessories

O-ring  
Screw M4 x 8 4 pcs



With CPR112G adapter



\* ±1 ppm within -10° to +70 °C  
±2.5 ppm within -40° to +60 °C