SMW
SWEDISH MICROWAVE AB

SMW PLL-LNBs

Low Phase Noise PLL-LNBs within the Ku-band

The main applications for Swedish Microwave´s commercial Ku-band PLL-LNBs are from Low- to High speed data, Digital- or Analogue audio, VSAT systems and Commercial satellite headends.

Comes standard with wide frequency range, low phase noise, low noise figure, F- or N-connector and two-year warranty.

High LO-stability +/- 150, +/ 100, +/- 25 or +/- 10 kHz over temperature, to limit the drift of frequency.

Options include customized gain, customized LO, RF-shielding, separate DC power input and extended frequency range.

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, within Europe, is the oldest manufacturer of LNBs. In the standard product range we have DRO-LNBs, PLL-LNBs, LNAs, Block Downconverters (BDC), Up- & Down Converters, Quattro LNBs, Twin LNBs, Ortho mode transducers (OMT), Line Amplifiers and Feed horns.

Swedish Microwave is today one of the leading manufacturers of microwave components needed for satellite receiving equipment and other industrial products.

Specification SMW PLL-LNB

SMW PLL +/- 150 kHz (+/- 100 kHz)		9.75 GHz	10.0 GHz	10.75 GHz	11.3 GHz
Frequency range		10.7 - 11.8 GHz	10.95 - 12.1 GHz	11.7 - 12.75 GHz	12.25 - 12.75 GHz
LO frequency		9.75 GHz	10.0 GHz	10.75 GHz	11.3 GHz
LO stability (over temp.)		+/- 150 kHz	+/- 150 kHz	+/- 150 kHz	+/- 150 kHz
	Option	+/- 100 kHz	+/- 100 kHz	+/- 100 kHz	+/- 100 kHz
Output frequency		950 - 2050 MHz	950 - 2100 MHz	950 - 2000 MHz	950 - 1450 MHz
Gain		52 +/- 4 dB	52 +/- 4 dB	52 +/- 4 dB	52 +/- 3 dB
LO Phase noise typical		-67 dBc @ 1 kHz	-67 dBc @ 1 kHz	-67 dBc @ 1 kHz	-67 dBc @ 1 kHz
		-85 dBc @ 5 kHz	-85 dBc @ 5 kHz	-85 dBc @ 5 kHz	-85 dBc @ 5 kHz
		-90 dBc @ 10 kHz	-90 dBc @ 10 kHz	-90 dBc @ 10 kHz	-90 dBc @ 10 kHz
		-110 dBc @ 100 kHz	-110 dBc @ 100 kHz	-110 dBc @ 100 kHz	-110 dBc @ 100 kHz
		-120 dBc @ >1 MHz	-120 dBc @ >1 MHz	-120 dBc @ >1 MHz	-120 dBc @ >1 MHz

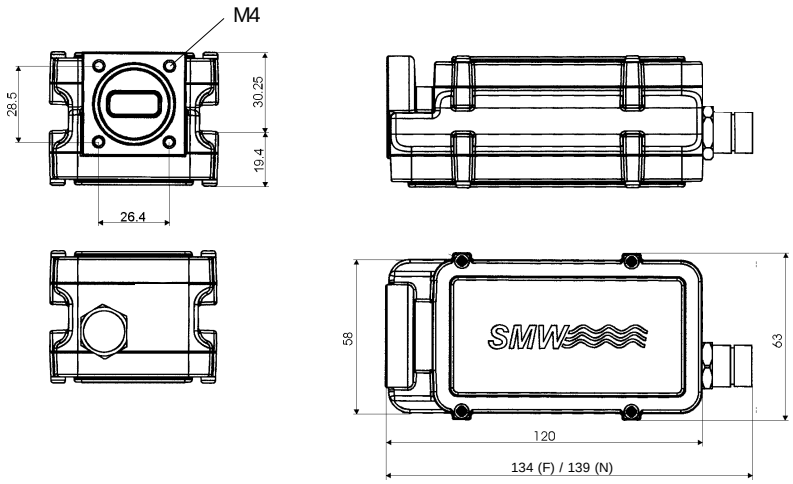
SMW PLL +/- 25 kHz (+/- 10 kHz)		9.75 GHz	10.0 GHz	10.25 GHz	10.75 GHz	11.3 GHz
Frequency range		10.7 - 11.8 GHz	10.95 - 12.1 GHz	11.2 - 11.7 GHz	11.7 - 12.75 GHz	12.25 - 12.75 GHz
LO frequency		9.75 GHz	10.0 GHz	10.25 GHz	10.75 GHz	11.3 GHz
LO stability (over temp.)		+/- 25 kHz	+/- 25 kHz	+/- 25 kHz	+/- 25 kHz	+/- 25 kHz
	Option	+/- 10 kHz	+/- 10 kHz		+/- 10 kHz	+/- 10 kHz
Output frequency		950 - 2050 MHz	950 - 2100 MHz	950 - 1450 MHz	950 - 2000 MHz	950 - 1450 MHz
Gain		52 +/- 4 dB	52 +/- 4 dB	52 +/- 4 dB	52 +/- 4 dB	52 +/- 3 dB
LO Phase noise typical		-70 dBc @ 1 kHz	-70 dBc @ 1 kHz	-70 dBc @ 1 kHz	-70 dBc @ 1 kHz	-70 dBc @ 1 kHz
		-85 dBc @ 5 kHz	-85 dBc @ 5 kHz	-85 dBc @ 5 kHz	-85 dBc @ 5 kHz	-85 dBc @ 5 kHz
		-90 dBc @ 10 kHz	-90 dBc @ 10 kHz	-90 dBc @ 10 kHz	-90 dBc @ 10 kHz	-90 dBc @ 10 kHz
		-110 dBc @ 100 kHz	-110 dBc @ 100 kHz	-110 dBc @ 100 kHz	-110 dBc @ 100 kHz	-110 dBc @ 100 kHz
		-120 dBc @ >1 MHz	-120 dBc @ >1 MHz	-120 dBc @ >1 MHz	-120 dBc @ >1 MHz	-120 dBc @ >1 MHz

General Specification

Gain variation within 30 MHz	+/- 0.4 dB
Noise Figure, typical	0.8 dB
LO radiation	-60 dBm
Image rejection	40 dB min
1 dB gain compression point	+5 dBm
Input	WR-75 waveguide (R120)
Output	F-connector 75 ohm or N-connector 50 ohm
Output VSWR	2.1:1 max
DC power	12 - 24 V 250 mA max
Operating temperature	-30 to +60°C (-30 to +70°C for LO stab. +/- 10 kHz)
Dimensions	134 (139 N) x 58 x 50 mm
Weight	526 g (F-connector) 542 g (N-connector)

Options

LO Stability +/- 10 kHz over temp. -10 to +70°C
Customized gain and variation
RF-shielding
Sep. DC power input
Specified LO. Min. 50-100 pcs
PLL with SMA-input. See Block Downconverter
Extended frequency range PLL 11.3. E.g. 11.25 - 13.25 GHz



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