



Professional *2-Band Switchable* Ka-Band PLL LNB

The professional Ka-Band PLL LNB comes standard with Low Phase Noise to meet DVB-S2X Professional services.

Options include customized LO, customized gain, separate DC power input and separate input for the 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 118 countries.

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

SPECIFICATION SMW 2-Band Switchable Ka-Band PLL-LNB

Ka-Band PLL-LNB		17.20 / 18.20 GHz	17.20/18.25 GHz	17.25 / 18.20 GHz	17.25/18.25 GHz
Frequency range	Band 1	18.20-19.20 GHz	18.20-19.20 GHz	18.20-19.20 GHz	18.20-19.20 GHz
	Band 2	19.20-20.20 GHz	19.20-20.20 GHz	19.20-20.20 GHz	19.20-20.20 GHz
LO frequency		17.20 / 18.20 GHz	17.20/18.25 GHz	17.25 / 18.20 GHz	17.25/18.25 GHz
IF	Band 1	1000-2000 MHz	1000-2000 MHz	950-1950 MHz	950-1950 MHz
	Band 2	1000-2000 MHz	950-1950 MHz	1000-2000 MHz	950-1950 MHz
Ka-Band PLL-LNB		18.20 / 19.20 GHz	18.20/19.25 GHz	18.25 / 19.20 GHz	18.25/19.25 GHz
Frequency range	Band 1	19.20-20.20 GHz	19.20-20.20 GHz	19.20-20.20 GHz	19.20-20.20 GHz
	Band 2	20.20-21.20 GHz	20.20-21.20 GHz	20.20-21.20 GHz	20.20-21.20 GHz
LO frequency		18.20 / 19.20 GHz	18.20/19.25 GHz	18.25 / 19.20 GHz	18.25/19.25 GHz
IF	Band 1	1000-2000 MHz	1000-2000 MHz	950-1950 MHz	950-1950 MHz
	Band 2	1000-2000 MHz	950-1950 MHz	1000-2000 MHz	950-1950 MHz

General specification

Switching 2-Band Voltage (V)	Band 1	13 V (11.5-14.0 V)
	Band 2	18 V (16.0-19.0 V)
Gain		60 dB typ.
Gain variation within 30 MHz max.		±0.4 dB
Gain variation over band max.		±3 dB
Noise Figure, typ.		1.5 dB
LO Phase noise typ.		-40 dBc @ 10 Hz
		-65 dBc @ 100 Hz
		-85 dBc @ 1 kHz
		-90 dBc @ 10 kHz
		-95 dBc @ 100 kHz
		-112 dBc @ >1 MHz
LO radiation		-60 dBm
Image rejection		30 dB min
P1dB typ.		+15 dBm
IP3 typ.		+25 dBm
Input		WR 42
Output (waterproof)		F-connector 75 ohm, N-connector 50 ohm or SMA-connector 50 ohm
Input VSWR		2.3:1 typ.
Output VSWR		2.1:1 typ.
Operating temperature		-40 to +80 °C
Storage temperature		-40 to +80 °C
Dimensions F-connector		121 x 56 x 44 mm
N-connector		127 x 56 x 44 mm
Weight		326 g (F- & SMA-connector)
		345 g (N-connector)
Power typ.		5W

Internal reference

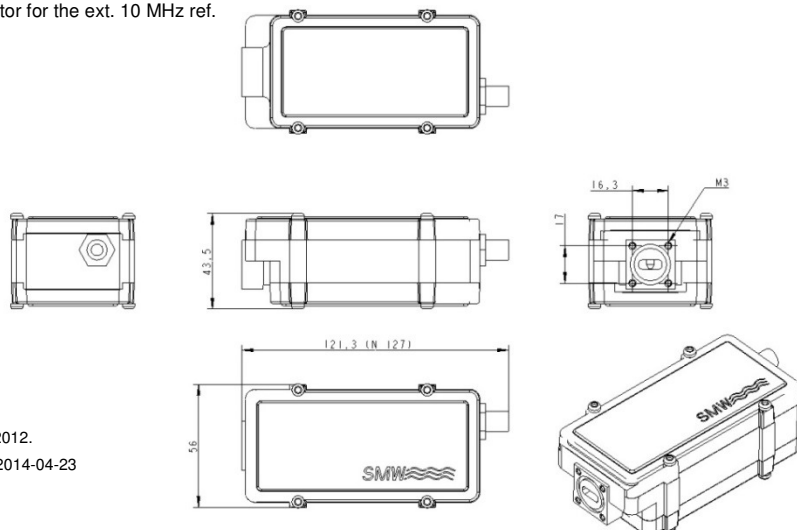
LO stability		±1 ppm -40° to +60 °C (±1.5 ppm -40° to +80 °C) or ±2.5 ppm -40° to +60 °C (±3.5 ppm -40° to +80 °C)
Long term LO stability over all conditions		
LO Stability ±1 ppm		±3 ppm
LO Stability ±2.5 ppm		±6 ppm

External 10 MHz reference

LO stability	Depend on the external reference
External reference input frequency	10 MHz
External reference input power	-5 to +5 dBm
External reference input port	Output IF connector. Option via sep. connector (SMA, N or F)

Options

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



Specifications are subject to change without notice. General terms Orgalime S 2012.

Products from Swedish Microwave AB are made for commercial use.

2014-04-23