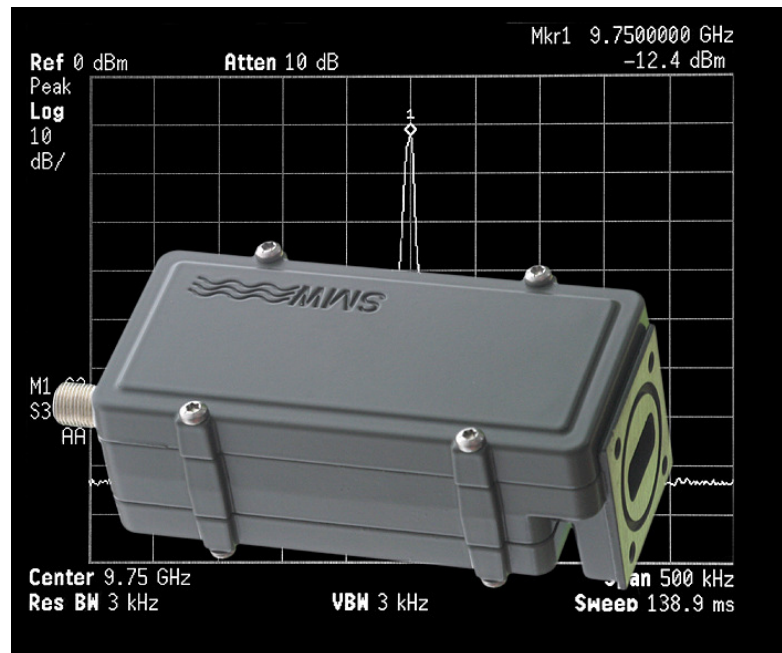


## ***PLL-LNB ext. 10 MHz ref.***



### ***With Excellent Phase Noise***

Comes standard with High IP3, Excellent Phase Noise to provide very low BER in very low data rate applications, but also in applications with very fast rates. F-, N- or SMA output connector, wide frequency range and low noise figure.

Options include Separate input-connector for the External 10 MHz reference, Customized gain, Customized LO, Separate DC power input connector 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 (SMW) was founded 1986 and is today a leading manufacturer of professional LNBs (Low Noise Blockdownconverters). The company is located in Motala Sweden, and to date the products are installed in more than 80 countries.

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

# Specification SMW PLL-LNB ext. 10 MHz ref.

SMW PLL ext. 10 MHz ref.	9.75 GHz	10.0 GHz	10.25 GHz	10.5 GHz
Frequency range	10.7 - 11.8 GHz	10.95 - 12.1 GHz	11.2 - 11.7 GHz	11.45 - 12.2 GHz
LO frequency	9.75 GHz	10.0 GHz	10.25 GHz	10.5 GHz
Output frequency	950 - 2050 MHz	950 - 2100 MHz	950 - 1450 MHz	950 - 1700 MHz

SMW PLL ext. 10 MHz ref.	10.6 GHz	10.7 GHz	10.75 GHz	11.2 GHz
Frequency range	11.7 - 12.75 GHz	11.65 - 12.75 GHz	11.7 - 12.75 GHz	12.2 - 12.75 GHz
LO frequency	10.6 GHz	10.7 GHz	10.75 GHz	11.2 GHz
Output frequency	1100 - 2150 MHz	950 - 2050 MHz	950 - 2000 MHz	1000 - 1550 MHz

SMW PLL ext. 10 MHz ref.	11.25 GHz	11.3 GHz	11.475 GHz
Frequency range	12.2 - 12.75 GHz	12.25 - 12.75 GHz	12.5 - 12.75 GHz
LO frequency	11.25 GHz	11.3 GHz	11.475 GHz
Output frequency	950 - 1500 MHz	950 - 1450 MHz	1025 - 1275 MHz

## General Specification

LO stability (over temp.)  
 External reference input frequency  
 Gain  
 Gain variation within 30 MHz max.  
 Gain variation max.  
 Noise Figure, typical  
 LO Phase noise typical

## SMW PLL ext. 10 MHz ref.

Depends on external reference  
 10 MHz  
 60 dB typ. (55 dB min.)  
 $\pm 0.4$  dB  
 $\pm 4$  dB  
 0.8 dB  
 -70 dBc @ 10 Hz  
 -70 dBc @ 100 Hz  
 -75 dBc @ 1 kHz  
 -85 dBc @ 10 kHz  
 -100 dBc @ 100 kHz  
 -130 dBc @ 10 Hz  
 -135 dBc @ 100 Hz  
 -143 dBc @ 1 kHz  
 -145 dBc @ 10 kHz  
 -160 dBc @ 100 kHz  
 -60 dBm  
 40 dB min  
 +15 dBm  
 +25 dBm  
 WR-75 waveguide (R120)  
 -5 to +10 dBm  
 Output IF connector. Option: Sep. connector (F, N or SMA)  
 F-connector 75 ohm,  
 N-connector 50 ohm or  
 SMA-connector 50 ohm  
 2.3:1 max.  
 2.1:1 max.  
 12 - 24 V  
 270 mA typ.  
 -40 to +80 °C  
 -40 to +80 °C  
 122 (127 N) x 56 x 44 mm  
 329 g (F- & SMA-connector)  
 345 g (N-connector)

External Reference Phase noise

LO radiation

Image rejection

1 dB gain compression point

IP3

Input

External reference input power

External reference input port

Output (waterproof)

Input VSWR

Output VSWR

DC power

Operating temperature

Storage temperature

Dimensions

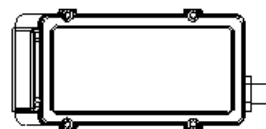
Weight

## Options

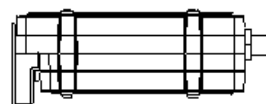
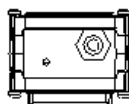
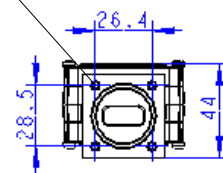
10 MHz ref. via separate input connector (F, N or SMA)  
 Separate DC power input (F, N or SMA)  
 Customized gain and variation  
 Customized LO  
 SMA-input  
 Extended frequency range

## Attached accessories

O-ring  
 Screw M4 x 8 4 pcs



M4  
 Depth 7mm



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