

SMW WDL Digital



Dual Band with Low Phase Noise

The WDL Digital is the standard Dual LNB (Low- and High Band) to receive Low- & High Band simultaneously. The LNB has an extremely low phase noise designed for SMATV/CATV- and Professional systems.

Comes as standard with low noise figure, F- or N-connectors and two-years warranty. Options include high LO stability +/- 1, 1.5 or 2 MHz, RF-shielding, customized gain, low output VSWR 1.55:1 and customized LOs (e.g. 10.2 & 11.0 GHz).

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 all LNBs are 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 WDL Digital

SMW	WDL Digital type E	WDL Digital type B
Frequency range Low/High	10.7 - 11.7 / 11.7 - 12.75 GHz	10.95 - 11.7 / 11.7 - 12.75 GHz
LO frequency	9.75 GHz (Low band) 10.6 GHz (High band)	10.0 GHz (Low band) 10.75 GHz (High band)
Output frequency	950 - 1950 MHz (Low band) 1100 - 2150 MHz (High band)	950 - 1700 MHz (Low band) 950 - 2000 MHz (High band)
Spurious signals in low band high band	-60 dBm typ. @ 1700 MHz -70 dBm typ. @ 1700 MHz	-60 dBm typ. @ 1500 MHz -70 dBm typ. @ 1500 MHz

General Specification

Noise figure, typical	0.8 dB
Gain	52 +/- 4 dB
Gain variation	+/- 0.4 dB within 30 MHz
LO stability (over temp.)	+/- 3 MHz
LO Phase noise typ.	-75 dBc @ 1 kHz -85 dBc @ 5 kHz -95 dBc @ 10 kHz -110 dBc @ 100 kHz -115 dBc @ >1 MHz
LO radiation	-60 dBm
Image rejection	50 dB min.
1 dB gain compression point	+5 dBm
DC power	12-24V / 180 mA typ (the DC can be feed through any of the two connectors)
Operating temperature	-30 to +60° C
Input flange	WR-75 waveguide
Output connectors	F-connectors 75 ohm or N-connectors 50 ohm Water-proof
Output VSWR	2:1 max
Dimensions	134 (139 N) x 58 x 50 mm
Weight	587 g (F-connectors) 626 g (N-connectors)

Options

High stability LO, +/- 1 MHz over temp.
 High stability LO, +/- 1.5 MHz over temp.
 High stability LO, +/- 2 MHz over temp.
 RF-shielding
 Customized LOs. (E.g. 10.2 & 11.0 GHz)
 Customized gain
 Low output VSWR, 1.55:1

