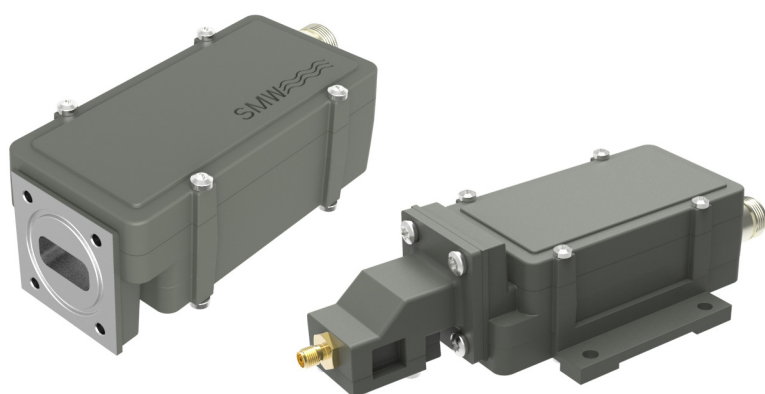


## 13-15 GHz PLL LNB/BDC/TLT

*LNB / Block Down Converter for monitoring uplink transmissions Test Loop Translators*

The LNB / BDC is a cost effective alternative to monitor the Satellite Uplink Transmissions with L-Band measurement equipment. The unit covers several uplink bands within the Range of 12.70–15.50 GHz.

Options include customized LO, customized gain, separate DC power input and separate input for external 10 MHz reference.



### Features

- **Wide frequency range**
- **Several LO frequencies**
- **Choose between Internal Ref. or External Ref. input models**
- **Low phase noise**
- **Compact size and light weight**
- **Wide operating temperature range**
- **For outdoor use**
- **Option Low profile BDC to fit 1U for indoor build-in applications**

### TECHNICAL SPECIFICATIONS

MODEL:	11.75	11.80	11.80 E	12.00	12.50	12.55	12.80	13.00	13.05	13.10	13.20	13.50
Input Frequency	12.70-13.70 GHz	12.75-13.25 GHz	12.75-13.75 GHz	13.00-14.00 GHz	13.45-14.50 GHz	13.50-14.50 GHz	13.75-14.50 GHz	13.95-14.50 GHz	14.00-14.50 GHz	14.05-14.55 GHz	14.90-15.30 GHz	14.50-15.50 GHz
LO Frequency	11.75 GHz	11.80 GHz	11.80 GHz	12.00 GHz	12.50 GHz	12.55 GHz	12.80 GHz	13.00 GHz	13.05 GHz	13.10 GHz	13.20 GHz	13.50 GHz
Output Frequency	950-1950 MHz	950-1450 MHz	950-1950 MHz	1000-2000 MHz	950-2000 MHz	950-1950 MHz	950-1700 MHz	950-1500 MHz	950-1450 MHz	950-1450 MHz	1700-2100 MHz	1000-2000 MHz
Gain	By request, 0 to 55 dB in 5dB steps (Factory programmable)											
Flatness	±0.4 dB max. within 30 MHz, ±3 dB max. over band											
Noise Figure / Noise Temperature	1.2 dB / 92 K @ 55 dB gain configuration typ., increasing to appr. 20 dB / 28710 K @ 0 dB gain configuration (2.0 dB / 170 K with transition @ 55 dB gain)											
Phase Noise	-35 dBc @ 10 Hz	-62 dBc @ 100 Hz	-75 dBc @ 1 kHz	-83 dBc @ 10 kHz	-93 dBc @ 100 kHz	-120 dBc @ ≥1MHz typ.						
Image Rejection	40 dB min.											
Output P1dB	+10 dBm typ. (Gain 0 dB +5 dBm)											
Output IP3	+20 dBm typ. (Gain 0 dB +15 dBm)											
Output VSWR	2.1:1 typ.											
Output Connector	F-type 75Ω / N-type 50Ω / SMA-type 50Ω											
Input Waveguide	WR75 / R120. Flange PBR 120. TLT – Test Loop Translator: SMA-connector via transition.											
Input VSWR	2.3:1 typ.											
LO Leakage	-60 dBm @ waveguide input max.											
MODELS with Internal Reference	±5 kHz -20 to +70°C (±10 kHz -40 to +80°C), ±10 kHz -20 to +70°C (±15 kHz -40 to +80°C)											
MODELS with External 10 MHz Reference	Sine Wave, Level: -10 to +10 dBm. Supplied through the output connector (with no ext. 10 MHz ref. present LO shifts -20 ppm)											
DC Input	+12 to +24 V						+15 to +24 V					
Current Drain	270 mA typ. supplied through output connector											
Temperature Range	Storage and operating: -40 to +80°C											
Dimensions LNB	122 x 57 x 46 mm (F- & SMA-connector), 128 x 57 x 46 mm (N-connector), for drawing, see <a href="http://www.smw.se">www.smw.se</a>											
Weight	329 g, 399 g with transition (F- & SMA-connector), 345 g, 415 g with transition (N-connector)											
Miscellaneous	Enclosed conductive O-ring, mounting screws (M4 x 10) 4 pcs (for LNB).											
Options	Customized LO frequency and frequency range, Separate DC input connector F-, N- or SMA-type, Low profile BDC to fit 1U., Pressurizable (LNB)											
<b>SEE THE RF OVER FIBER AND L-BAND SECTIONS FOR OUTPUT OPTIONS</b>												

Rev.08-21-5G

Above parameters are generic product family values. For part number specific min./max. values, please consult us.

Specifications are subject to change without notice. Products from Swedish Microwave AB are made for commercial use.