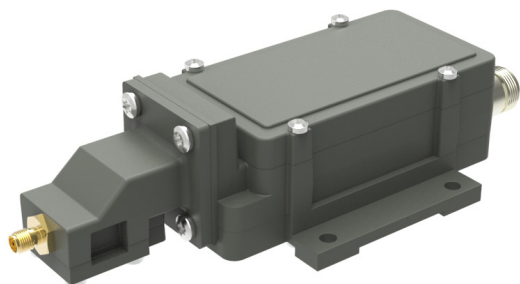


# Single band PLL BDC

## Single band Block Down Converter Ku-Band to L-Band



The Single-band BDC has a selection of several Frequency Bands.

The BDC is ideal for installation in various professional applications with low symbol rate carriers.

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

### Features

- **Wide Frequency range**
- **Low phase noise to meet the VSAT profile of DVB-S2X**
- **High P1dB and IP3**
- **Choose between Internal Ref. or External Ref. input models**
- **Compact size and light weight**
- **Wide operating temperature range**
- **For outdoor use**
- **Option Low profile to fit 1U for indoor build-in applications**

### TECHNICAL SPECIFICATIONS

MODEL:	9.75	10.00	10.00 E	10.25	10.50	10.60	10.70	10.75	11.20	11.25	11.30
Input Frequency	10.70–11.80 GHz	10.95–11.80 GHz	10.95–12.10 GHz	11.20–11.70 GHz	11.45–12.20 GHz	11.70–12.75 GHz	11.65–12.75 GHz	11.70–12.75 GHz	12.20–12.75 GHz	12.20–12.75 GHz	12.25–12.75 GHz
LO Frequency	9.75 GHz	10.00 GHz	10.00 GHz	10.25 GHz	10.50 GHz	10.60 GHz	10.70 GHz	10.75 GHz	11.20 GHz	11.25 GHz	11.30 GHz
Output Frequency	950–2050 MHz	950–1800 MHz	950–2100 MHz	950–1450 MHz	950–1700 MHz	1100–2150 MHz	950–2050 MHz	950–2000 MHz	1000–1550 MHz	950–1500 MHz	950–1450 MHz
Gain	By request, 10 to 60 dB in 5dB steps (Factory programmable)										
Flatness	±0.4 dB max. within 30 MHz ±3 dB max. over band										
Noise Figure / Noise Temperature	3 dB / 289 K @ 60dB gain configuration typ., increasing to appr. 20 dB / 28710 K @ 0 dB gain configuration										
Phase Noise	-35 dBc @ 10 Hz	-62 dBc @ 100 Hz	-75 dBc @ 1 kHz	-83 dBc @ 10 kHz	-93 dBc @ 100 kHz	-120 dBc @ ≥1 MHz typ.					
Image Rejection	40 dB min.										
Output P1dB	+15 dBm typ. (+10 dBm @10-30 dB gain)										
Output IP3	+25 dBm typ. (+20 dBm @10-30 dB gain)										
Output VSWR	2.1:1 max.										
Output Connector	F-type 75Ω / N-type 50Ω Option SMA-type 50Ω										
Input Connector	SMA-type 50Ω										
Input VSWR	2.3:1 max.										
LO Leakage	-60 dBm @ waveguide input										
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	Level: -10 to +10 dBm. Supplied through output connector (with no ext. 10 MHz ref. present LO shifts -20 ppm)										
DC Input	See Multiband Ku-Band PLL LNB tables for full details. Supplied through output connector										
Current drain	270 mA typ.										
Temperature Range	Storage and operating: -40 to +80°C										
Dimensions	175 x 80 x 46 mm (F-connector) 180 x 80 x 46 mm (N-connector) ( for drawing, see <a href="http://www.smw.se">www.smw.se</a> )										
Weight	399 g (F-& SMA-connector) 415 g (N-connector)										
Options	Customized LO frequency and gain, Separate DC input connector F-, N- or SMA-type, Low profile to fit 1U.										
<b>See the Fiberoptic and L-Band sections for output options</b>											

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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.

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