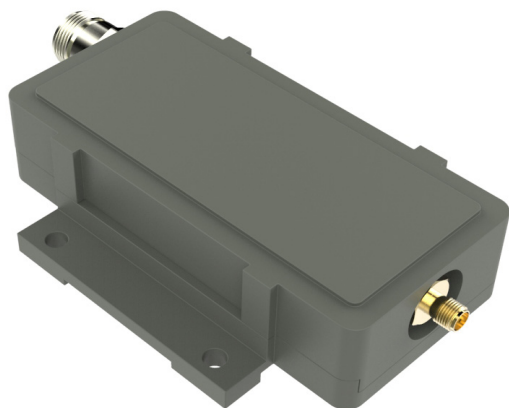


PLL BDC 5.70-7.25 GHz



5.70-7.25 GHz to L-Band BDC (Block Down Converter)



The C-Band PLL block down converter is intended for monitoring C-Band uplink transmissions within the frequency range 5.70 to 7.25 GHz. Fixed gain between 0 dB and 55 dB.

RF input is SMA female. IF output is standard L-band non inverted spectrum via N-,F- or SMA-connector. Options include customized LO, customized gain, separate DC power input and separate input for the external 10 MHz reference.

Features

- **Low phase noise to meet DVB-S2X VSAT profile**
- **Choose between Internal Ref. or External Ref. input models**
- **Compact size and light weight**
- **Wide operating temperature range**
- **For outdoor use, IP 67 classed**
- **Low profile to fit 1U for build-in applications**
- **LNB-Link / Versa-Link for Fiber optic RF link**

TECHNICAL SPECIFICATIONS

MODEL:	C-BAND BDC
Input Frequency	5.70-7.25 GHz Any 1.20 GHz block within the frequency range
LO Frequency	By request, 4.75 - 5.40 GHz (Factory programmable)
Output Frequency	950 - 2150 MHz, non-inverted spectrum
Gain	By request, 0 dB to 55 dB in 5 dB steps (Factory programmable)
Flatness	±0.4 dB max. within 30 MHz ±2 dB max. over band
Noise Figure / Noise Temperature	8 dB / 1540 K @ 50dB gain configuration typ., increasing to appr. 20 dB / 28710 K @ 0 dB gain configuration
Phase Noise	-40 dBc @ 10 Hz -62 dBc @ 100 Hz -80 dBc @ 1 kHz -88 dBc @ 10 kHz -95 dBc @ 100 kHz -120 dBc @ ≥1MHz typ.
Image Rejection	40 dB min.
Output P1dB	+15 dBm, +5 dBm <10 dB gain typ.
Output IP3	+25 dBm, +15 dBm <10 dB gain typ.
Output VSWR	2.1:1 max.
Output Connector	F-type 75Ω / N-type 50Ω / SMA-type 50Ω
Input Connector	SMA-type
Input VSWR	2.3:1 max.
LO Leakage	-60 dBm @ RF input
MODELS with Internal Reference	±0.5 ppm -20 to +70°C (±1 ppm -40 to +80°C), ±1 ppm -20 to +70°C (±1.5 ppm -40 to +80°C), ± 2.5 ppm -40 to +80°C
MODELS with External 10 MHz Reference	Sine Wave, Level: -15 to +5 dBm. Supplied through output connector (with no ext. 10 MHz ref. present LO shifts -20 ppm)
DC Input	+12 to +18 V, 300-400 mA typ. Supplied through output connector
Temperature Range	Storage and operating: -40 to +80°C
Dimensions	127 x 80 x 30 mm (F- & SMA-connector), 133 x 80 x 30 mm (N-connector), for drawing, see www.smw.se
Weight	330 g (F- & SMA-connector) 344 g (N-connector)
Options	Customized gain & variation, Separate DC input connector F- N- or SMA-type, Separate 10 MHz ref. input.
See the RF over Fiber and L-Band sections for output options	

Rev.11-20-2E

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.