Wideband PLL BDC

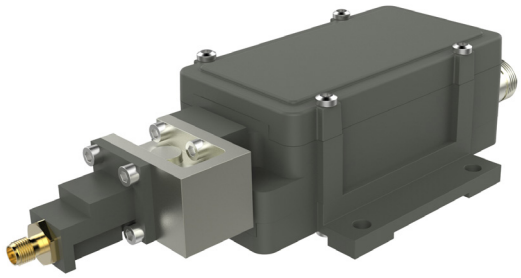
SMW SWEDISH MICROWAVE AB

Wideband, extended IF output
Simultaneous reception
2 GHz of the Ka-Band

The Wideband output BDC supports reception of wide range of Ka-Band with 1 LO and extended IF output 950 - 2950 MHz.

The BDC features Low Phase Noise to meet the DVB-S2X Professional Services profile.

Ideal for installation in various applications with Low Symbol Rate carriers incuding HTS.



NEW!

DVB S2X

Features

- ***Custom Frequency ranges within 17.70-22.20 GHz***
- ***Wide Ka-Band coverage with 1 LO and 1 output***
- ***Standard Ultra Low Phase Noise meets all profiles 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***
- ***Low gain option***

TECHNICAL SPECIFICATIONS

MODEL:	BDC 16.75 GHz	BDC 18.25 GHz
Input Frequency	17.70 - 19.70 GHz	19.20 - 21.20 GHz
LO Frequency	16.75 GHz	18.25 GHz
Output Frequency	950 - 2950 MHz	
Gain	By request, 0 dB to 60 dB in 5 dB steps (Factory programmable)	
Flatness	±0.4 dB max. within 30 MHz, ±3 dB max. full band	
Noise Figure / Noise Temperature	2 dB / 170 K @ 60dB gain configuration typ., increasing to appr. 20 dB / 28710 K @ 0 dB gain configuration	
Phase Noise	-40 dBc @ 10 Hz -65 dBc @ 100 Hz -85 dBc @ 1 kHz -90 dBc @ 10 kHz -95 dBc @ 100 kHz -112 dBc @ ≥1 MHz typ.	
Image Rejection	30 dB min.	
Output P1dB	+15 dBm typ.	
Output IP3	+25 dBm typ.	
Output VSWR	2.0:1 typ.	
Output Connector	N-type 50Ω Option SMA-type 50Ω	
Input Waveguide	WR 42 / R 220. Flange PBR 220	
Input VSWR	1.9:1 max. with Isolator (included)	
LO Leakage	-60 dBm @ waveguide input	
MODELS with Internal Reference	±1 ppm -40 to +60°C (±1.5 ppm -40 to +80°C), ±2.5 ppm -40 to +60°C (±3.5 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 +24 V Supplied through output connector	
Power Consumption	5 W typ.	
Temperature Range	-40 to +80°C	
Dimensions	178 x 80 x 44 mm (SMA-connectors), 184 x 80 x 44 mm (N-connectors), for drawing, see www.smw.se	
Weight	399 g (SMA-connector), 418 g (N-connector)	
Options	Customized LO, gain & variation, separate DC input, separate 10 MHz ref. input,	
See the RF over Fiber and L-Band sections for output options		

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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.

Swedish Microwave AB, Dynamov. 5, S-591 61 Motala, Sweden. Tel: +46 141 216135, sales@smw.se, www.smw.se