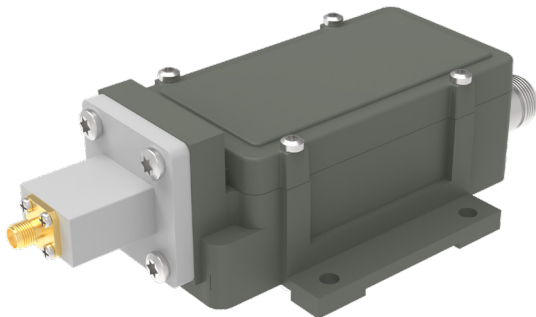


Ku BDC 10.70-12.75 GHz 1 Band

Key features



- Excellent Phase Noise
- Auto switch between External or Internal reference
- Wide operating temperature range
- High P1dB and IP3
- Alarm and Monitoring & Control as option
- Gain 20 to 60 dB on request

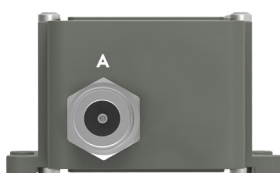


Description

The new professional Singleband BDC from Swedish Microwave offers many options of input frequency ranges with IF range up to 950-2150 MHz.

An preferred option is Alarm and Monitoring & Control via Modbus RS485, for surveillance of the most important parameters and some adjustments. The configurable Alarm output alerts you if something goes wrong with the signal reception or if the external reference fails

BDC connector (standard)



Connector A (standard)

Type: N female (option F female or SMA female)
Functions: L-Band out, DC in, External 10 MHz in

BDC connectors (optional)



Connector B (optional)

Type: M8 female, 4 pin, A-coded
Functions: Alarm and M&C

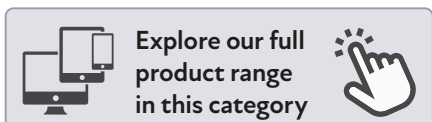
Connector B (optional)



- 1 = Alarm open collector (max. 200 mA) or optionally DC input.
- 2 = A pos+ RS485
- 3 = B neg- RS485
- 4 = Common (GND)
- 5 = Shield

Connector C (optional)

Type: SMA female only
Functions: Ext. 10 MHz in and/or DC input



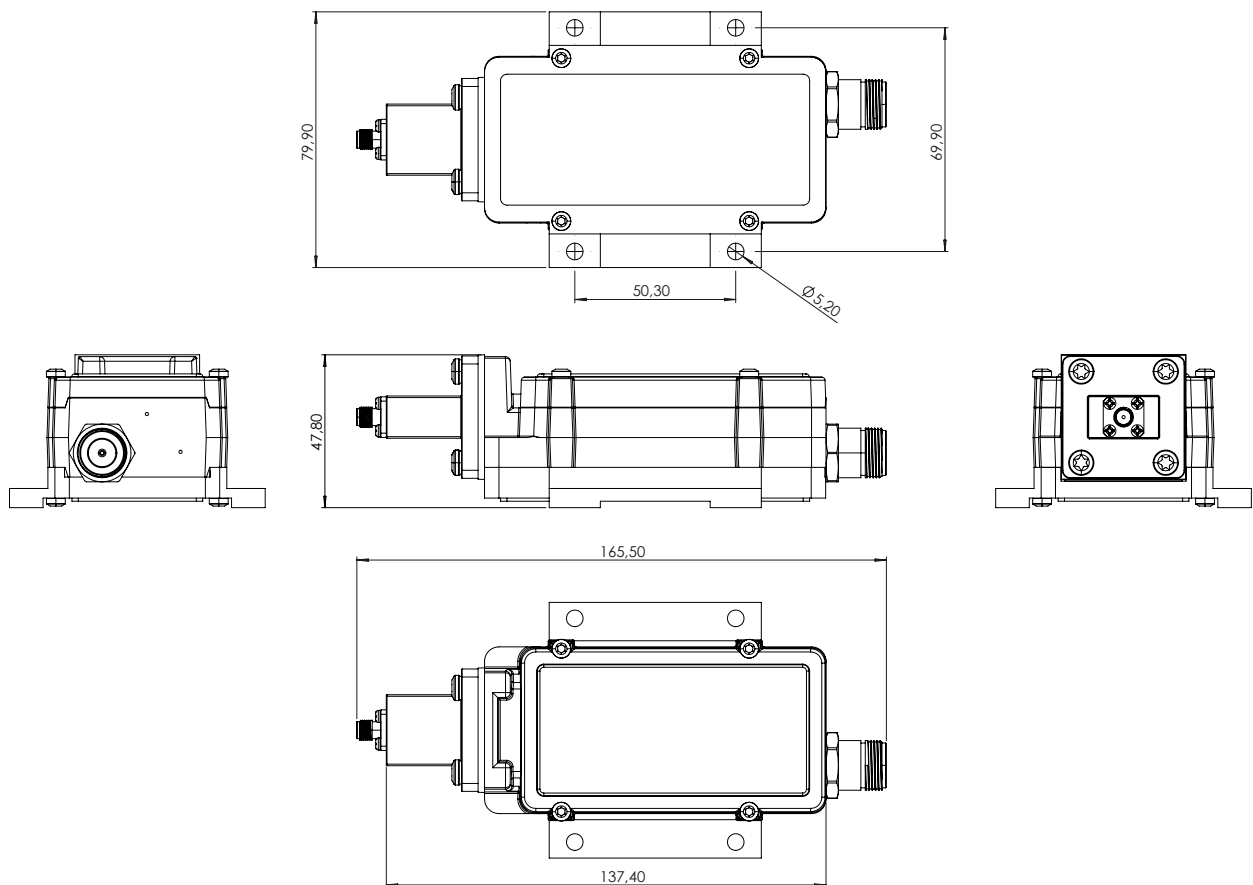
Ku BDC 10.70-12.75 GHz 1 Band

Technical specifications

	MODEL/LO	9.75	10.00	10.25	10.50	10.60	10.70	10.75	11.20	11.25	11.30
INPUT	Freq. range (GHz)	10.70-11.80	10.95-12.10	11.20-11.70	11.45-12.20	11.70-12.75	11.65-12.75	11.70-12.75	12.20-12.75	12.20-12.75	12.25-12.75
	IF (MHz)	950-2050	950-2100	950-1450	950-1700	1100-2150	950-2050	950-2000	1000-1550	950-1500	950-1450
	Input connector	SMA female 50Ω									
	DC Input	nom. +12 to +24 V (11V min., 26V max.) through output connector or separate connector (SMA). 5W max.									
	Input VSWR	2.3:1 max.									
INTERNAL	LO ref.	Auto switch External 10 MHz ref / Internal ±2.5 ppm -40 to +80°C									
	Ext. 10 MHz ref.	Sinus wave, input level -10 dBm to +10 dBm through output connector or optionally via separate SMA connector.									
	LO Leakage	-60 dBm max. @ RF input									
	Gain	By request, 20 to 60 dB (factory programmable)									
	Gain variation over 24h	±0.1 dB @ 23°C									
	Flatness	± 1.5 dB max. each band									
	Noise figure	3.0 dB / 289 K typ. @ 60 dB gain configuration, increasing to appr. 20 dB / 28710 K @ 20 dB configuration.									
	Phase Noise	10 Hz -35dBc/Hz • 100 Hz -65dBc/Hz • 1 kHz -82dBc/Hz • 10 kHz -86dBc/Hz • 100kHz -95dBc/Hz • 1MHz -120dBc/Hz (max.)									
	Image Rejection	20 dB min.									
	Group delay	± 1ns max.									
OUTPUT	IF output range	950-2150 MHz									
	Output P1dB	+ 5 dBm min. @ 20 to 40 dB gain, +15 dBm min. @ 40 to 60 dB gain									
	Output IP3	+15 dBm min. @ 20 to 40 dB gain, +25 dBm min. @ 40 to 60 dB gain									
	Output VSWR	1.7:1 max. (N and SMA connector), 2.3:1 max. (F connector)									
	Output Connector	N-female 50Ω , SMA-female 50Ω or F-female 75Ω									
GENERAL	Dimensions	166 x 80 x 48 mm									
	Weight	425 g									
	Temperature range	Storage and operating: -40 to +80°C, -40 to +176°F									
	MTBF	MTBF as per MIL-HDBK-217F Notice 2: Environmental Condition GF (Ground Fixed): >690000 hours, Environmental Condition AIC (Airborne, Inhabited, Cargo): >360000 hour, Quality level: Commercial, Temperature used for MTBF calculation: +35°C Ambient									
OPTIONS		- Separate SMA connector for DC input - Alarm and Monitoring & Control - WR 75 input (without SMA transition) - Custom number of bands (2 to 8 bands) - Custom LOs - Custom input frequencies									

Ku BDC 10.70-12.75 GHz 1 Band

Technical Drawing



Professional Satcom Frequency Converters & Components. All products are fully CE and RoHS compliant and every unit includes full documentation of performance tests and quality control. Please contact sales@smw.se to configure or customize the unit to your needs. Visit smw.se or scan QR code to see our full product range and request a quote.

