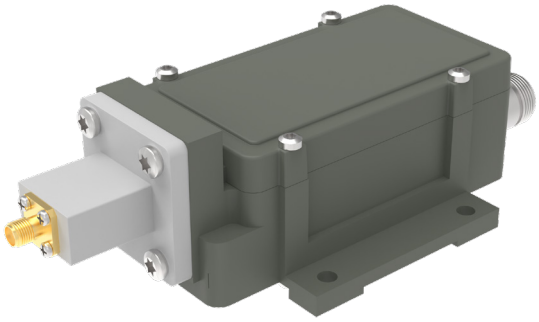
Ku BDC 10.70-12.75 GHz 2 Band Dual Out WDL

Key features



- **Simultaneous reception Low and High band**
- **Full Ku-Band 10.70-12.75 GHz**
- **Ultra Low Phase Noise (ULP) as standard**
- **Models with Ext. 10 MHz ref. or Internal ±1 ppm**
- **High P1dB and IP3**
- **Wide operating temperature range**
- **Dual output Low band and High band**
- **Low Input VSWR**

Description

With simultaneous reception of Low & High Ku-Band 10.70-12.75 GHz (model E) or 10.95-12.75 GHz (model B) you are ready for all demands with this BDC.
It comes with Ultra Low Phase Noise is standard to meet the requirements for reception of DVB-S2X (professional profiles), N3 and N4 signals.

A Low Loss Isolator is included to ensure very good input VSWR.

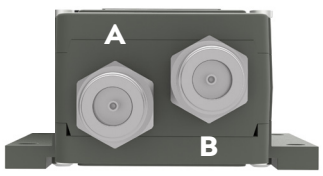
Ultra Low Phase Noise (ULP) is recommended* for:

DVB-S2: - Narrowband 8PSK 8/9 and 9/10 FEC
- 16 APSK or higher modulation type (any bandwidth)
- All applications with "Pilot Off"

DVB-S2X: All "MODCODS" and symbol rates
NS3/NS4: All "MODCODS" and symbol rates

* Please note that these are general recommendations and that all other system components also will influence system performance.

BDC rear connectors



Connector A
Type: Female F, N or SMA
Function: Low band RF Output

Connector B
Type: Female F, N or SMA
Function: DC input, 10 MHz input, High band RF Output

Explore our full product range in this category

SMW SWEDISH MICROWAVE AB

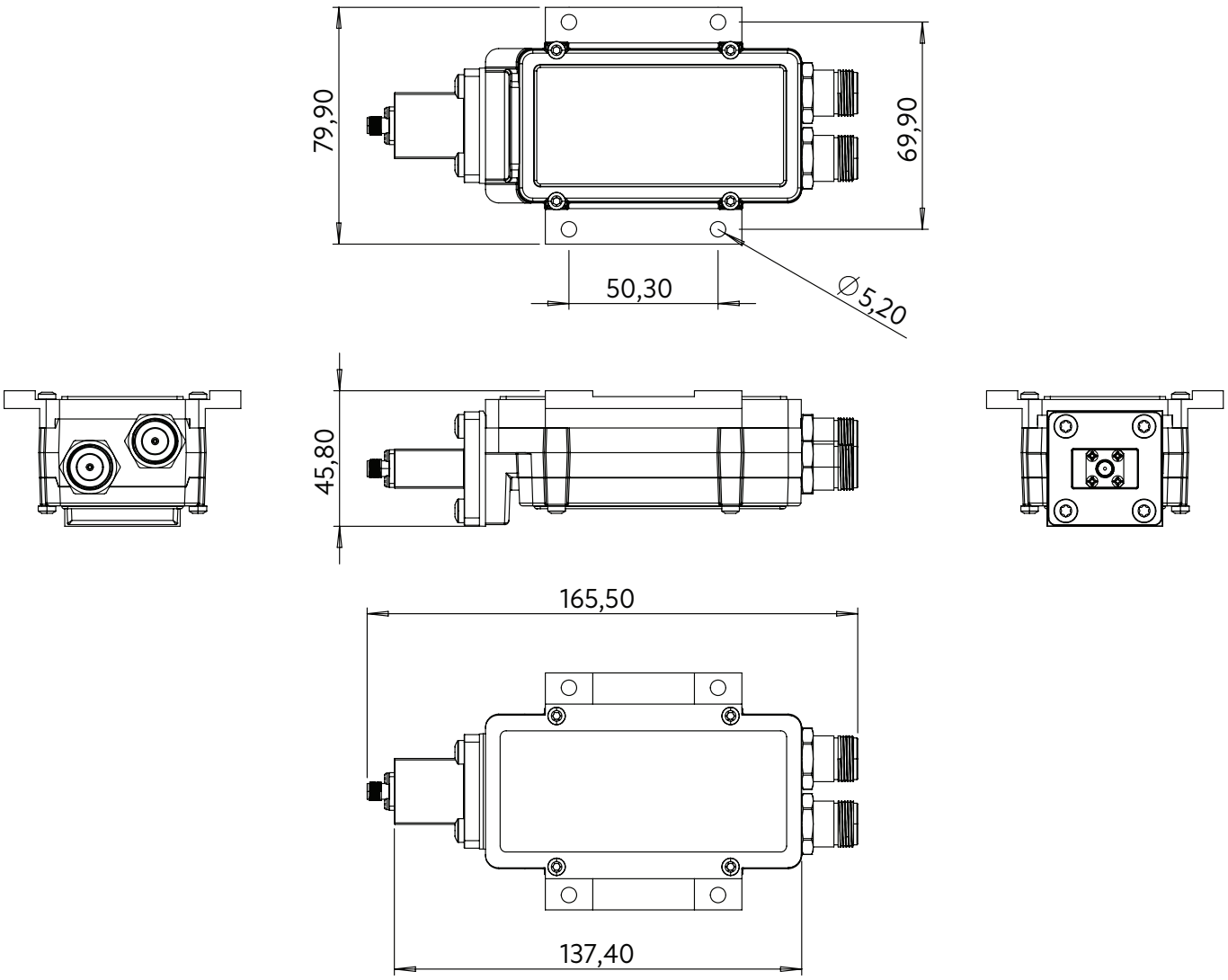
Ku BDC 10.70-12.75 GHz 2 Band Dual Out WDL

Technical specifications

	Model	E	B
INPUT	Input frequency	10.70-12.75 GHz	10.95-12.75 GHz
	LO	9.75 and 10.60 GHz	10.00 and 10.75 GHz
	Low / High band	10.70-11.70 / 11.70-12.75 GHz	10.95-11.70 / 11.70-12.75 GHz
	Input connector	SMA female 50Ω	
	Input VSWR	1.67:1 max.	
	Power input	+15 to 24 VDC (15 VDC min., 26 VDC max.) via High band connector on Ext. 10 MHz. Ref models and one or both connectors on Internal ref. models	
	Current drain	260 mA @ +20 V 290 mA @ +18 V 320 mA @ +16 V	
INTERNAL	Gain	By request, 10 to 60 dB gain in 5 dB steps (factory 60 dB typ., 55 dB min.	
	Gain flatness	± 0.4 dB max. within 30 MHz, ±2 dB max. over band	
	MODEL with Internal LO ref.	± 1 ppm max. -20 to +70°C, ± 1.5 ppm max. -40 to +80°C	
	MODEL with External 10 MHz ref.	Sine Wave, Level -10 dBm to +10 dBm. Supplied through High band output connector. With no ext. 10 MHz ref. present LO shifts -20 ppm.	
	Spuriouses Low / High band	-60dBm @ 1700 MHz / -70dBm @ 1700 MHz typ.	-60dBm @ 1500 MHz / -70dBm @ 1500 MHz typ.
	Out of band rejection	20 dB min.	
	Group Delay	±1 ns max.	
	Image rejection	40 dB min.	
	Phase Noise	-35 dBc @ 10 Hz -65 dBc @ 100 Hz -82 dBc @ 1 kHz -94 dBc @ 10 kHz -98 dBc @ 100 kHz -120 dBc @ ≥1MHz, typ.	
	Noise figure @ 23°C	2.0 dB / 170 K typ. @ 60 dB gain typ., increasing to appr. 20 dB / 28710 K @ 0dB gain	
OUTPUT	Output frequency	Low band 950-1950MHz, High band 1100-2150 MHz	Low band 950-1700MHz, High band 950-2000 MHz
	Output P1dB	+15 dBm typ., +10 dBm typ. @ gain 10-30 dB	
	Output IP3	+25 dBm min., 20 dBm typ. @ gain 10-30 dB	
	Output VSWR	2.1:1 max.	
	Output Connectors	F female 75Ω , N female 50Ω or SMA female 50Ω	
GENERAL	Dimensions	161 x 80 x 46 mm (F and SMA), 166 x 80 x 46 mm (N)	
	Weight	400 g (F and SMA), 435 g (N)	
	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): >245000 hours, Environmental Condition AIC (Airborne, Inhabited, Cargo): >122000 hours, Quality level: Commercial, Temp used for MTBF calculation: +35 C Ambient	
OPTIONS		- DC and 10 MHz input at Low band output connector - Customized gain and variation - Extended low band 10.95-11.8 GHz / 10.95-12.15 GHz (type B) - Low profile to fit 1 U	

Ku BDC 10.70-12.75 GHz 2 Band Dual Out WDL

Technical Drawing



Designed and Manufactured IN SWEDEN

Professional Satcom Frequency Converters & Components. All products are fully CE and RoHS complient 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.

ESATCOM INC
Esatcom Inc
SMW authorized distributor
www.esatcom.com
Tel
718.799.0084
Email
sales@esatcom.com