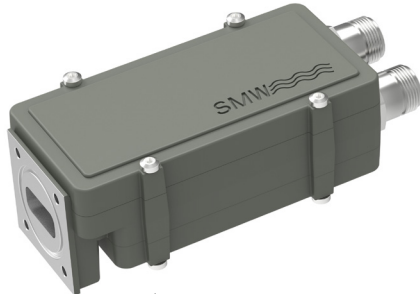


# Ku LNB 10.70-12.75 GHz WDL ULP Dual & Quattro

## Key features



Dual WDL LNB



QUATTRO WDL LNB with weather case

- 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  $\pm 1$  ppm
- High P1dB and IP3
- Wide operating temperature range
- Dual output Low band and High band
- Available as Dual LNB or Quattro LNB for both polarisations V/H

## 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.

It comes with Ultra Low Phase Noise is standard to meet the requirements for reception of DVB-S2X (professional profiles), N3 and N4 signals.

Can be ordered as a Single polarisation LNB or as a Quattro LNB for both Horizontal and Vertical polarisation including OMT and weather protection case.

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

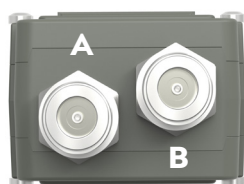
DVB-S2: - Narrowband 8PSK 8/9 and 9/10 FEC  
 - 16 APSK or higher modulation type (any bandwidth)  
 - All applications with "Pilot Off"

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.

### LNB rear connectors

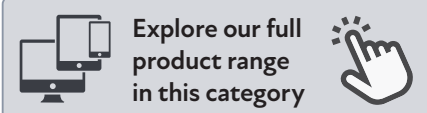


#### Connector A

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



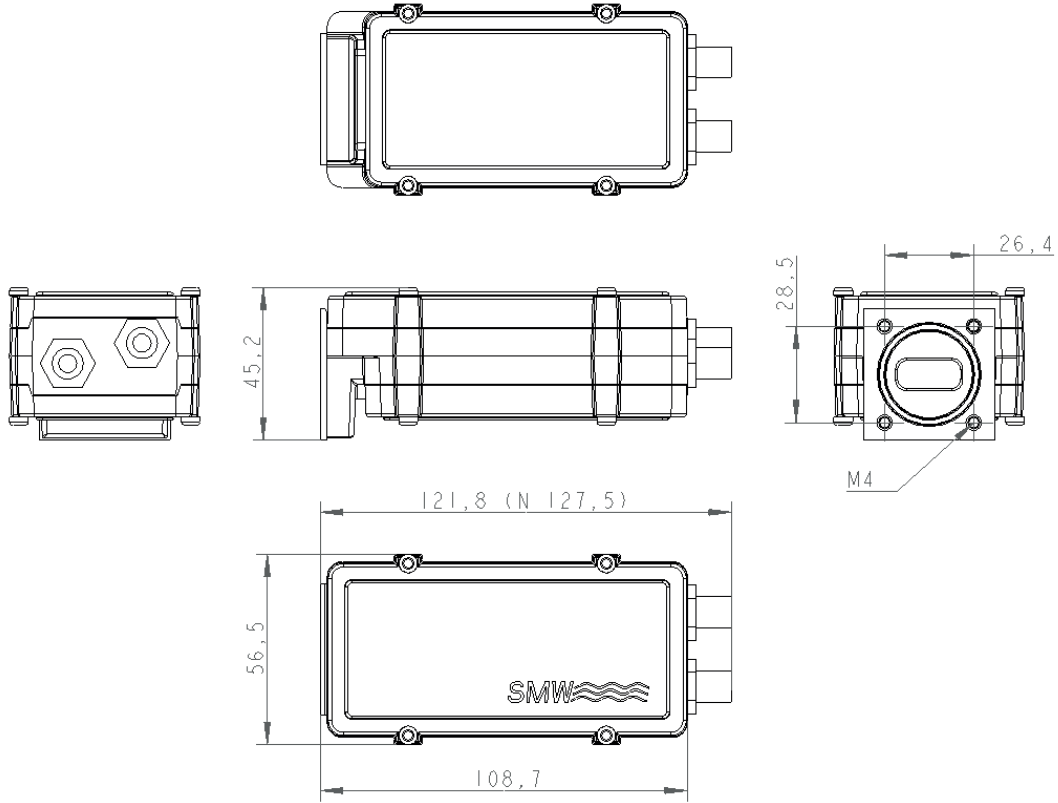
# Ku LNB 10.70-12.75 GHz WDL ULP Dual & Quattro

## Technical specifications

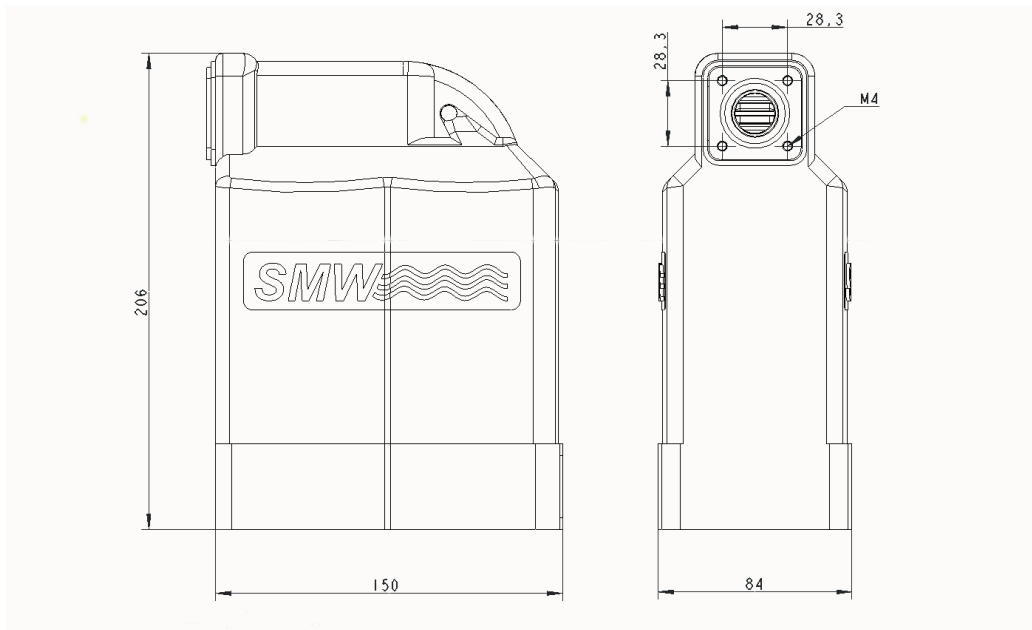
	Model	E	B
INPUT	Input frequency	10.70-12.75 GHz	10.95-12.75 GHz
	LO	9.75 and 10.60 GHz	10.00 and 10.75 GHz
	Low/High band	10.70-11.70 / 11.70-12.75 GHz	10.95-11.70 / 11.70-12.75 GHz
	Input WG	WR75 / R120	
	Input flange	PBR120 with M4 thread	
	Input VSWR	2.3:1 max.	
	Input max power	0 dBm instantaneous (not continuous)	
	DC input	+15 to 24 V (15 V min., 26 V max.) via High band connector on Ext. 10 MHz. Ref models and one or both connectors on Internal ref. models. Power consumption 5W typ.	
INTERNAL	Gain	60 dB typ., 55 dB min.	60 dB typ., 55 dB min.
	Gain flatness	± 0.25 dB max. within 30 MHz, ±2 dB max. over band	± 0.25 dB max. within 30 MHz, ±2 dB max. over band
	MODEL with Internal LO ref.	±1 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.	
	Spurious 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 typ.	
	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	0.8 dB / 59 K typ.	
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 min.	
	Output IP3	+25 dBm min.	
	Output VSWR	1.7:1 typ.	
	Output Connectors	F female 75Ω , N female 50Ω or SMA female 50Ω	
GENERAL	Dimensions	122 x 57 x 46 mm (F and SMA), 128 x 57 x 46 mm (N)	
	Weight	335 g (F and SMA), 371 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	
	Miscellaneous	Enclosed conductive O-ring, mounting screws, M4x10,4 pcs	
OPTIONS	Low gain option (48 to 54 dB for larger antennas)		
	Quattro LNB including OMT and weather protection		
	DC and 10 MHz input at Low band output connector		
QUATTRO	Cross polarisation	31.5 dB min.	
	Input Waveguide	C-120 (circular 18 mm)	
	Dimensions	205 x 152 x 83 mm	
	Weight	1162 g (F-connectors), 1231 g (N-connectors)	

# Ku LNB 10.70-12.75 GHz WDL ULP Dual & Quattro

## Technical Drawing



QUATTRO weather case



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](mailto:sales@smw.se) to configure or customize the unit to your needs. Visit [smw.se](http://smw.se) or scan QR code to see our full product range and request a quote.

