

# X LNB 7.25 - 7.75 GHz 1 Band SATCOM

## Key features



- Very Low Noise Figure
- Excellent Input VSWR
- High P1dB and IP3
- Low Phase noise meets DVB-S2X profile.
- Wide operating temperature range
- Internal filtering



### Description

The professional X-Band PLL LNB comes standard with Low Phase Noise to meet DVB-S2X Professional services.

The LNB features very low input VSWR to avoid the need of an external isolator. The X-band PLL LNB model 6.30 cover the frequency range 7.25 to 7.75 GHz with fixed gain of 60 dB typ. (55 dB min).

The internal filtering provides good isolation from interfering signals.

Available with Internal LO ref. or with External 10 MHz ref. input.



Optional enclosure fixing points



With optional CPR 112G adapter



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## Technical specifications

	<b>MODEL/LO</b>	<b>6.30</b>
	Input freq. GHz	7.25 - 7.75 GHz
	Input	WR 112 / R 84. Flange PBR 84
INPUT	Pressurizable	0.1 bar max. (option)
	Input max power	0 dBm instantaneous (not continuous)
	DC Input	+12 to +24 V supplied through output connector
	Current drain	190 mA @ +13 V, 160 mA @ +15 V, 140 mA @ +18 V, 110 mA @ +24 V
	Input VSWR	1.5:1 max.
INTERNAL	LO ref.	Internal or External 10 MHz ref. Note! Different models
	MODELS with External LO ref.	Sine Wave, Level -10 to +10 dBm. Supplied through output connector. With no ext 10 MHz ref. signal present LO shifts -20 ppm.
	MODELS with Internal LO ref.	±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)
	LO Leakage	-60 dBm max. @ waveguide input, -40 dBm max. @ IF output
	Gain	60 dB typ. (55dB min.)
	Gain variation over 24h	±0.1 dB @ 23°C
	Flatness	±0.4 dB within 30 MHz, ±2 dB max. over band
	Noise figure	0.69 dB / 50 K max., 0.6 dB / 43 K typ.
	Phase Noise	-35 dBc @ 10 Hz -65 dBc @ 100 Hz -85 dBc @ 1 kHz -90 dBc @ 10 kHz -100 dBc @ 100 kHz -128 dBc @ >1 MHz typ. Single sideband phase noise integrated over the bandwidth from 10 Hz to 16 kHz relative to carrier center frequency: < 3.4° RMS (two-sided value <4.8° RMS).
	Filter attenuation	15 dB @ 7.90 GHZ, 30 dB @ 8.00 GHZ, 40 dB @ 8.10 GHZ, 50 dB @ 8.20 GHZ, >60 dB @ 8.30-8.40 GHZ
	Group delay	± 1ns max.
	Out of band rejection	20 dB min.
OUTPUT	Image Rejection	60 dB min.
	IF output	950-1450 MHz
	Output P1dB	+15 dBm typ.
	Output IP3	+25 dBm typ.
	Output VSWR	1.7:1 max. @ 50 ohm
	Output Connector	N-type 50Ω , SMA-type 50Ω or F-type 75Ω
GENERAL	Dimensions	130 x 56 x 51 mm (F- & SMA-connector), 135 x 56 x 51 mm (N-connector)
	Weight	353 g WR112, 420 g CPR112G (F- & SMA-connector) 369 g WR112, 446 g CPR112G (N-connector)
	MTBF	MTBF as per MIL-HDBK-217F Notice 2: Environmental Condition GF (Ground Fixed): >489000 hours, Environmental Condition AIC (Airborne, Inhabited, Cargo): >245000 hours, Quality level: Commercial, Temp used for MTBF calculation: +35 C Ambient
	Temperature range	Storage and operating: -40 to +80°C, -40 to +176° F
	Miscellaneous	Enclosed conductive O-ring, mounting screws (M4 x 10) 4 pcs
OPTIONS	Options	Separate SMA connector for DC input or Ext. 10 MHz reference Customized gain CPR 112 G flange adaptor Extended IF

C-BAND

X-BAND

KU-BAND

KA-BAND

Q/V-BAND

RFoFIBER

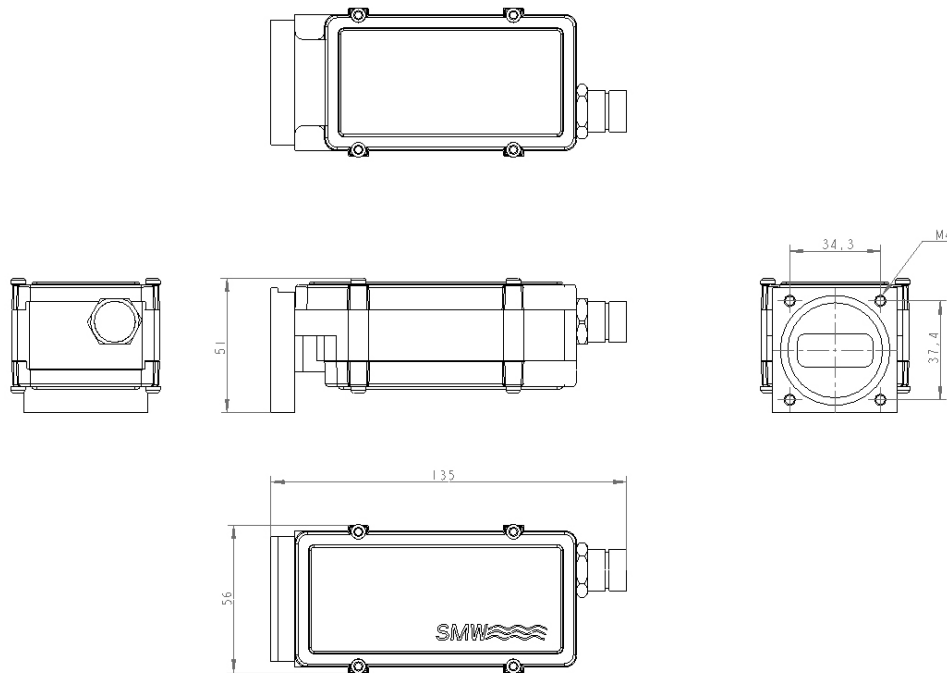
L-BAND

EXT REF

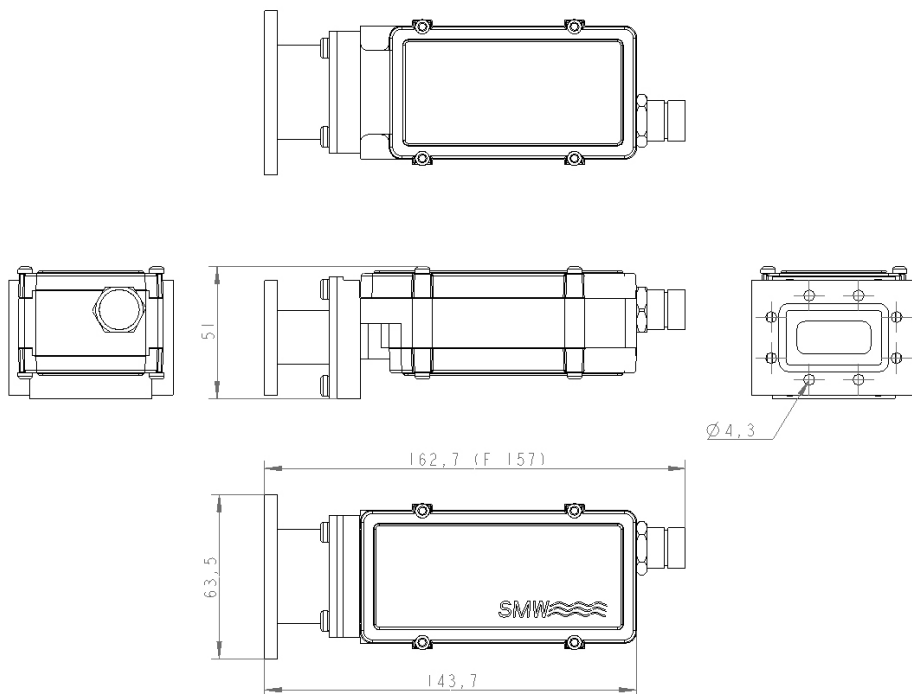
OTHER

# X LNB 7.25 - 7.75 GHz 1 Band SATCOM

## Technical Drawing



With optional CPR112G adaptor



Designed and  
Manufactured  
  
IN SWEDEN

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.



**SMW**  
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