## X LNB 7.75 - 8.50 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
- · Compact size and light weight

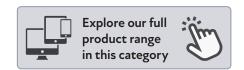
#### Description

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 6.80 cover the frequency range 7.75 to 8.50 GHz with fixed gain of 60 dB typ. (55 dB min.).

Available with Internal LO ref. or with External 10 MHz ref. input. Optional you can order this LNB with CPR 112G adapter.



With optional CPR 112G adapter



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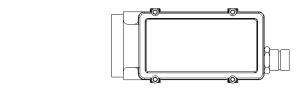
# Technical specifications

INPUT	MODEL/LO	6.80
	Input freq. GHz	7.75 - 8.50 GHz
	Input	WR 112 / R 84. Flange PBR 84
	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.	$\pm 0.5$ ppm -20 to +70°C ( $\pm 1$ ppm -40 to +80°C), $\pm 1$ ppm -20 to +70°C ( $\pm 1.5$ ppm -40 to +80°C)
	LO Leakage	-60 dBm max. @ waveguide input
	Gain	60 dB typ. (55dB min.)
	Flatness	$\pm 0.4$ dB within 30 MHz, $\pm 2$ 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.
	Group delay	± 1ns max.
	Out of band rejection	20 dB min.
	Image Rejection	60 dB min.
OUTPUT	IF output	950-1700 MHz
	Output P1dB	+15 dBm typ.
	Output IP3	+25 dBm typ.
	Output VSWR	1.7:1 max. @ 50 ohm
	Output Connector	N-type $50\Omega$ , SMA-type $50\Omega$ or F-type $75\Omega$
GENERAL	Dimensions	$130 \times 56 \times 51$ mm (F- & SMA-connector), $135 \times 56 \times 51$ 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

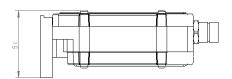


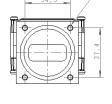
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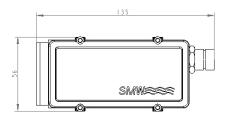
## Technical Drawing



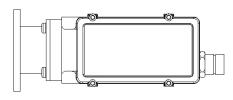


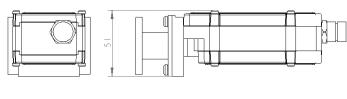


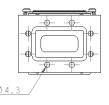


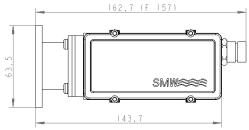


With optional CPR112G adaptor











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.



