

X LNB 7.75 - 8.50 GHz 1 Band

Key features



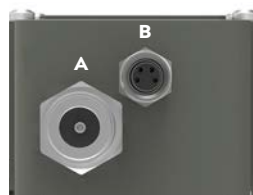
- 7.75-8.50 GHz
- External reference with fallback to Internal reference
- Alarm, Monitoring & Control as standard

Description

Swedish Microwave is a premium manufacturer of LNB and RF Distribution Systems. All in house and made in Sweden, since 1986.

The Swedish Microwave X-band LNB is based on a well proven technology platform. It's designed and optimized to meet market standards on performance.

LNB connectors (standard)



Connector A (standard)

Type: N-female, or SMA-female
Functions: L-Band out, DC in, External ref. in

LNB connectors (optional)



Connector C (optional)

Type: SMA-female only
Functions: Ext. ref. in and/or DC input

Connector B (standard)



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

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Technical specifications

	MODEL/LO	6.80
INPUT	Input frequencies	7.75 - 8.50
	Input	WR 112 / R 84. Flange PBR 84
	DC Input	nom +12 to +28 V
	Power consumption	3W typ
	Input max power	0 dBm, survival level in the range 6.2-9.6 GHz
	Input VSWR	1.5:1 max.
INTERNAL	LO ref.	External 10 MHz or 100 MHz ref. with fallback to Internal ± 25 ppm -40 to +80°C. Note! Different models for 10 MHz and 100 MHz ext ref.
	External LO ref.	Sine Wave, Level typ +5, 0 to +10 dBm. Supplied through output connector.
	LO Leakage	-60 dBm max. @ waveguide input, -40dBm max. @ IF output
	Gain	60 dB typ
	Gain variation over 24h	± 0.1 dB @ 23°C
	Flatness	± 0.4 dB within 30 MHz, ± 2 dB max. over band
	Noise figure @ 23°C	0.69 dB / 49 K max., 0.60 dB / 42 K typ.
	Phase Noise	-45 dBc @ 10 Hz -75 dBc @ 100 Hz -95 dBc @ 1 kHz -100 dBc @ 10 kHz -105 dBc @ 100 kHz -122 dBc @ ≥ 1 MHz -122 dBc @ ≥ 10 MHz
	Spuriouses in band	-65 dBc max (800-2200 MHz incl 2nd harmonic) @ -10dBm output level
	Spuriouses out of band	-40 dBm max (100 KHz-949 MHz and 2000-30000 MHz) @ -10dBm output level
	Group delay	± 1 ns max.
	Image Rejection	35 dB min.
OUTPUT	IF output	950-1700 MHz
	Output P1dB	15 dBm min.
	Output IP3	26 dBm min.
	Output VSWR	1.5:1 max.
	Output Connector	N female 50 Ω , optional SMA female 50 Ω
GENERAL	Dimensions	135 x 56 x 51 mm (N-connector) 128 x 56 x 51 mm (SMA-connector)
	Weight	381 g (N-connector), 375 g (SMA-connector)
	Alarm	Sum alarm, set via M&C to alarm in any combination of: LNA failure, Total current, LO lock (Ext/Int/n/a), signal power High/Low, supply voltage High/Low. Open collector 3.3 to 28 V, max. 200 mA (pullup 10 k Ohm at host side), pin 1 in M8 connector.
	M&C	Via MODBUS RTU RS485 electrical interface, see document Monitoring and Control technical interface for details. NOTE! Mates with M8 male connector/Cable, use only shielded CAT 5 cables
	MTBF	MTBF as per MIL-HDBK-217F Notice 2: Environmental Condition GF (Ground Fixed): >690000 hours, Environmental Condition AIC (Airborne, Inhabited, Cargo): >360000 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 and/or External reference -Customized gain -CPR 112 G flange adaptor -Pressurizable waveguide 0.1 bar max.

C-BAND

X-BAND

KU-BAND

KA-BAND

Q/V-BAND

RFo FIBER

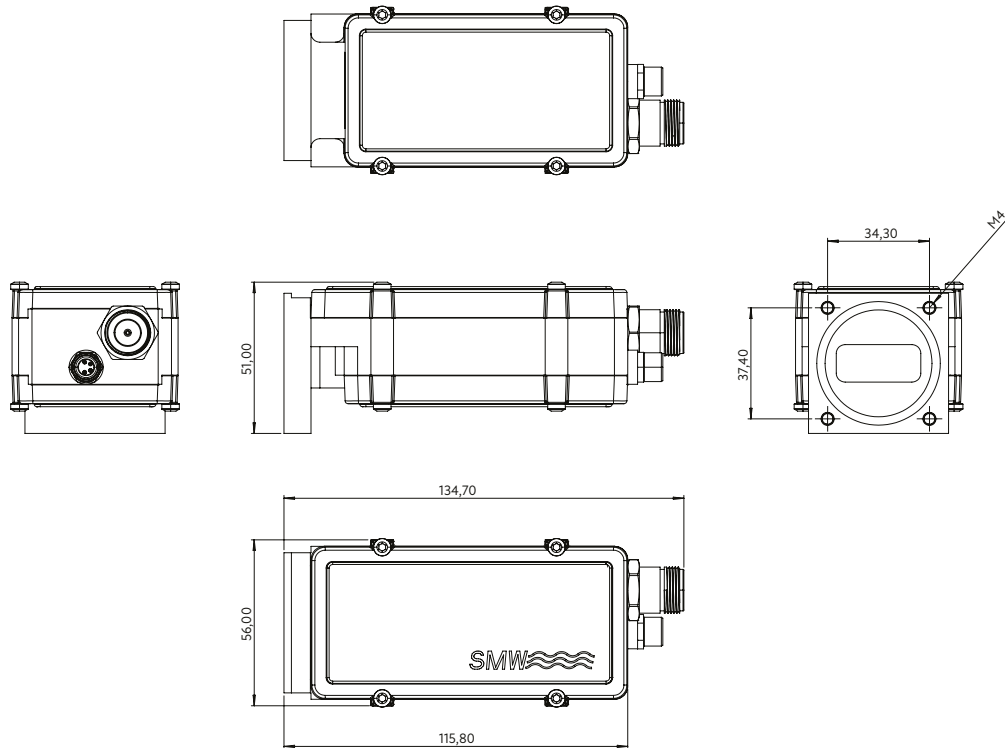
L-BAND

EXT REF

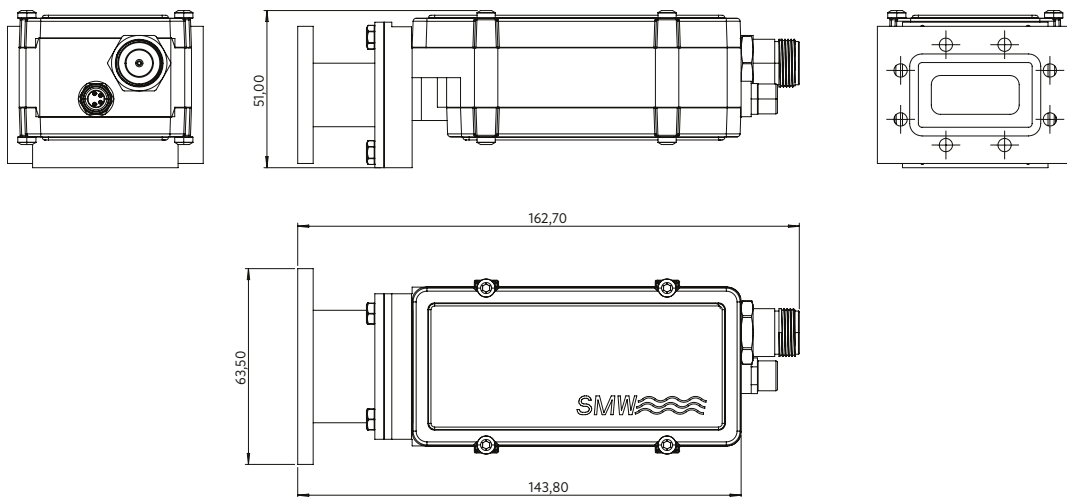
OTHER

X LNB 7.75 - 8.50 GHz 1 Band

Technical Drawing



With CPR112G adapter



Designed and
Manufactured

IN SWEDEN

SMW 

ESATCOM 
INC

SMW authorized distributor

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