

**L-BAND FM TRANSMITTER**

- **FM MODULATION**
- **HIGH RELIABILITY**
- **SMALL SIZE**
- **HIGH RF POWER**

This unit is a competitively priced L-band transmitter intended for use for airborne communications. It is a compact, reliable unit with state of the art electrical specifications.

Electrical characteristics:

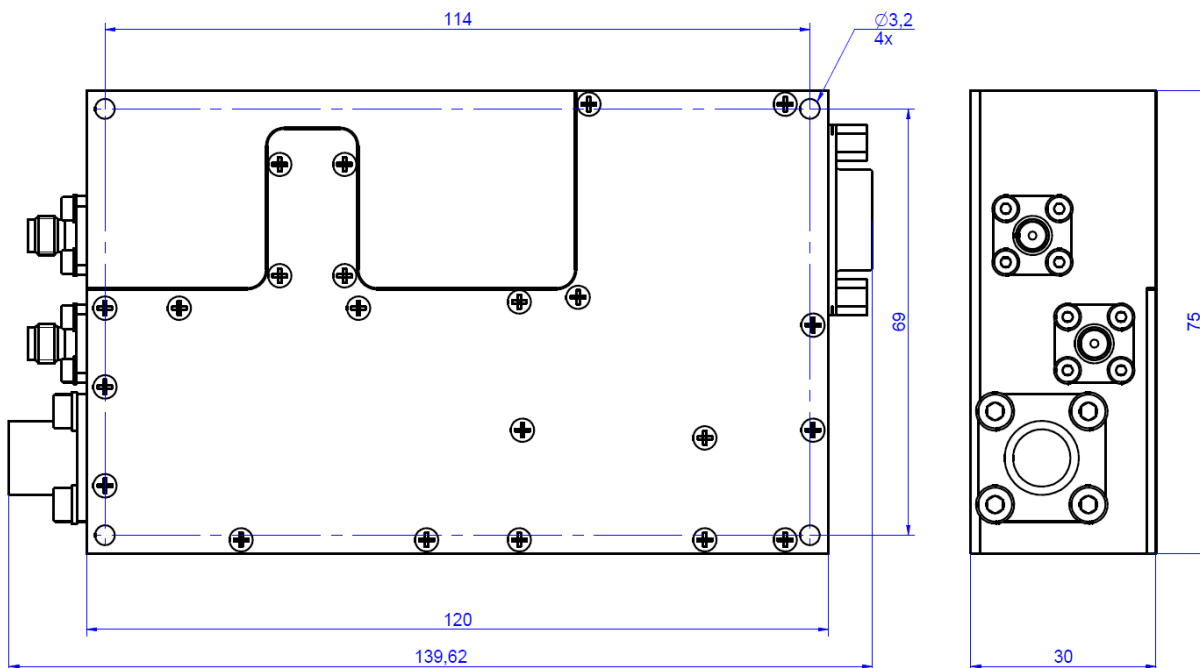
Parameter	Specification
Frequency	1450 to 1530 MHz , Programmable
Step size (programmable frequency)	0.5 MHz steps
Frequency stability	0,003%
Power	10 W (Continuous) fixed, typical
Output Impedance	50 Ohm
VSWR	1.5:1 or better
Harmonics, spurious Levels	less than -60 dB
Modulation type	FM, positive sense
Input signal coupling	AC (100Hz to 1MHz)
Protection	Indefinite RF open/ short circuit protection is provided
Modulation input impedance	10 K Ω
Analog Input Bandwidth	1 MHz (min)
Modulation input type	Analog mixer output with a bandwidth of 1 MHz (Mixer o/p consisting of PCM data in baseband and FM modulated voice on a subcarrier)
Deviation sensitivity	Either 0.5, 1, 2 MHz per 1 Vrms programmable or factory set minimum 500 KHz/Vrms or connector pin configurable
Max Deviation	+/- 1 MHz (+/-10%) min.
Deviation linearity	2% maximum, least square method/2%BFSL
Modulation distortion	less than 2%
DC Power Input	28+/- 4 V DC
Current Consumption	less than 3 A
Reverse polarity protection	Yes
RF output connector	SMA(F)
Mod input connector	SMA (M)
Dimensions	120 x 75 x 30 mm approx. (without heatsink)
Power Connector & Mating Connector	Standard circular type connector Mating connector is provided
Programming connector/ pin configurable connector for frequency selection	In case of pin programmable connector, the same is provided with suitable mating connector, backshells & screws to ensure positive link selection
Weight	<500gms The unit must be assembled to suitable base-plate for the cooling

Datasheet Ver. 1.1 / 20210513

Environmental Condition	
Operating Temperature	-20 Deg C to +70 Deg C It is the base-plate temperature. Proper heatsink is required for the unit.
Storage Temperature	-50 Dec C to +85 Deg C
Altitude	-200 to 22,000 ft or better
Humidity	Upto 95% (non condensed)
Vibration	20 Hz to 2 KHz, 14 g or 0.04g ² /Hz random, 3 axes
Shock	Half sine wave, 100 g peak, 11 msec, 3 axes
Linear Acceleration	Withstand 40 g in all 3 axes
EMI/RFI	IRIG 106-86 or equivalent Mil standard, The transmitter and other LRUs performance on helicopter is not affected due to EMI/EMC.

Specifications are subject to change without notice.

Outline drawing (mm):



Datasheet Ver. 1.1 / 20210513