

Features.

- ◆ High gain.
- ◆ Output power, 7W.
- ◆ Input, L band.
- ◆ Output, X band.
- ◆ 10 MHz external reference.
- ◆ Low spurious level.
- ◆ Operating temperature -30/+65°C.
- ◆ Size small and robust.
- ◆ Environmental IP67-IEC 60529.
- ◆ Optional CAG at the input port.
- ◆ Optional temperature range -45/+85°C.
- ◆ Optional supply through RF input port.
- ◆ Optional external reference between 5 and 50 MHz.

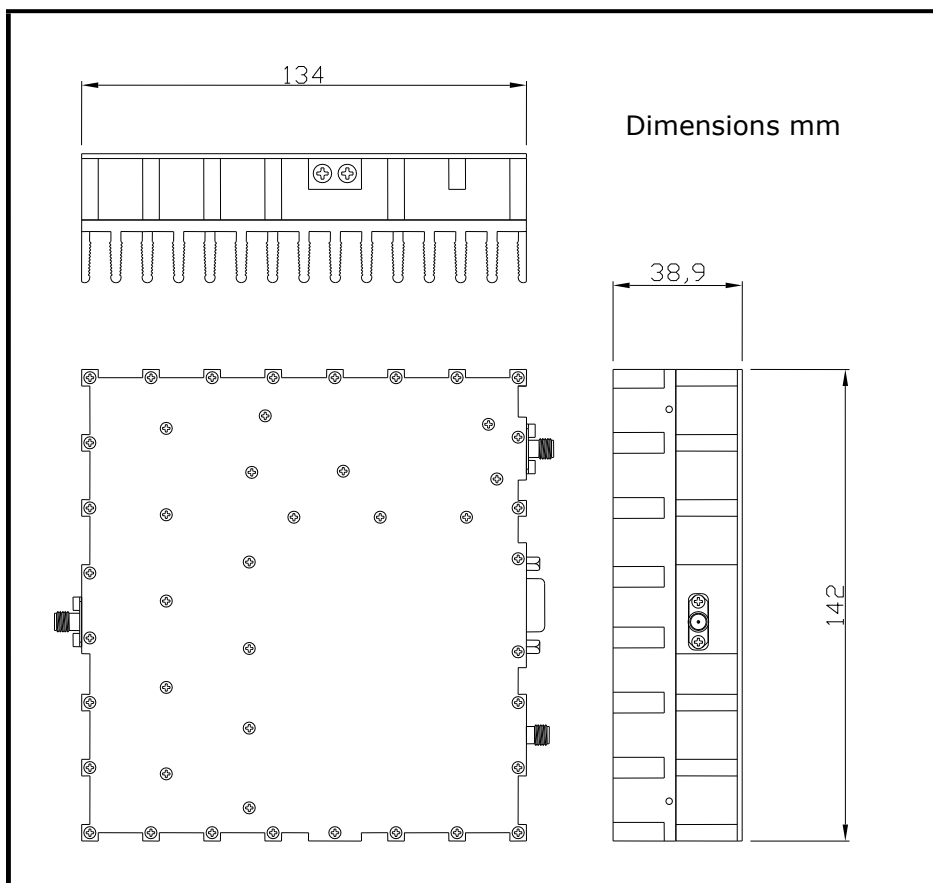


Description.

The model IF-BUC-7LX is a frequency converter (BUC) with small size and weight, designed to work in satellite communications systems working for all the X band, 7-9-8,4 GHz.

Due to their features is the best solution to use in fixed, mobiles and portable equipments, in any working conditions.

Mechanical drawing.



Electrical & mechanical specifications.

Tx Parameters	Value (T=25 °C)	Unit
Input frequency	950-1450	MHz
Input Impedance	50	Ohm
Input Power	-19	dbm
Input Return Loss	15	db
Output Frequency	7.9- 8.4	GHz
Lineal Output Power	+37	dbm
Output Power 1dB comp	+38.5	dbm typ
Output Impedance	50	Ohm
Output Return Loss	10	db
Transfer gain	57.5	db typ
Power Ripple over 500MHz	+/- 1	db
Power Ripple over 40 MHz	+/- 0.5	db
Noise Figure	10	db typ
Power stability 24hours	+/- 0.5	db
Ripple gain/temperature	+/-1.5	db
Spurious related to signal	-65	dbm
Spurious not related to signal	-85	dbm
IM3 (two carriers separated 3MHz SCL +32.0 dBm).	-30	dbc
Harmonics (1 dB comp)	-55	dbc
Parameters OL	Value	Unit
Frequency OL	6.950	MHz
Spectrum	Not inverted	
Phase noise (*)	-75dBc/Hz @ 1KHz -85dBc/Hz @ 10KHz -95dBc/Hz @ 100KHz	
Parameters External ref.	Value	Unit
Frequency external reference	10	MHz
Input Power	0/+7	dbm
Common parameters	Value	Unit
Supply	+20//+28/ 2.1	VDC/A typ
Monitoring	Failure VDC Unlocked PLO Temperature protection	Open contacts
Operating temperature (**)	-30/+60	°C
Storage temperature	-55/+95	°C
Relative humidity	100%	
Hermetic	IP 67-IEC 60529	
Connectorization	SMA (h); input-output Sub D 9 monitoring SMA(r-p); supply	
Weigh	1.1	Kg
Size	142x134x38.9	mm
Options	1: Supply through input port. 2: CAG at the input port. 3: External reference between 5 and 50 MHz. 4: Fun included.	

(*): The phase noise of the external reference must be at least 30dB better than the specification values.

(**): Required a fan with small dimensions.