

FMCW RF SIGNAL Source

RF:9.1-20GHz/Bandwidth:10.9GHz

Model: TLFS-FMCW-14.55G-10.9G

TLFS-FMCW-14.55G-10.9G is a FMCW RF Signal Source module. Its operating bandwidth covers 9.1 GHz to 20 GHz, with an output power of 0 dBm. The supported modulation waveforms include triangular wave and sawtooth wave.

Features:

- RF coverage : 9.1 to 20GHz
- Modulation Bandwidth : 10.9GHz
- Frequency modulation cycle:10ms
- Output Power: 0dBm Typ
- Great Spurious

Applications:

- Defense & federal communications
- Instrumentations

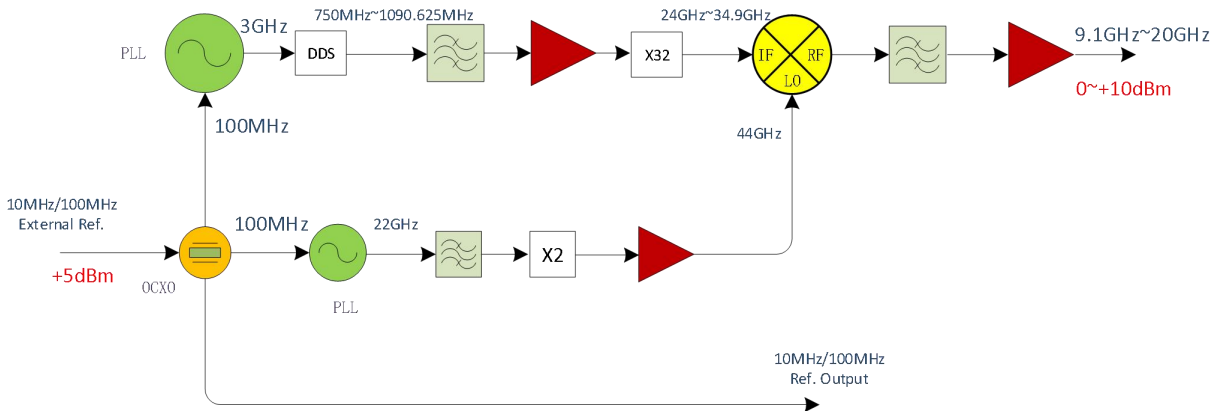
Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	9.1		20	GHz
Broadband modulation		10.9		GHz
Frequency modulation cycle	20	200		us
Modulated waveform	Triangle wave / Sawtooth wave			
Output power	0		10	dBm
Power flatness		±2.5		dB
Spurious(Single Frequency Point)		40		dBc
Harmonic Suppression		30		dBc
Dynamic Range (Continuous Sweep)		50		dB
Trigger Method	Internal/External			
Phase noise		-75		dBc/Hz@100Hz
		-80		dBc/Hz@1KHz
		-85		dBc/Hz@10KHz
		-90		dBc/Hz@100KHz
		-95		dBc/Hz@1MHz

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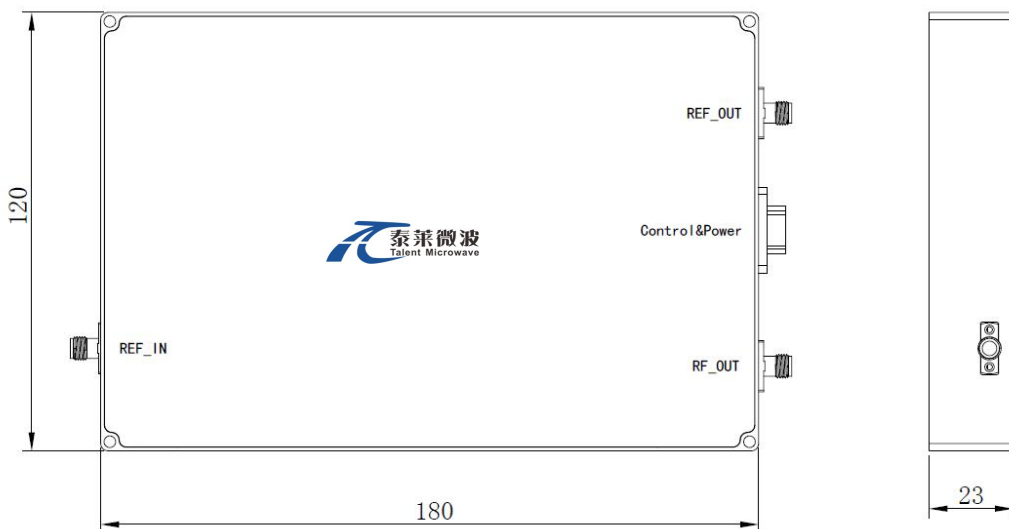
Parameter	Min	Typ	Max	Units
External Reference Input Frequency		100		MHz
Output Reference Frequency		100		MHz
Voltage		+12		V
Control Model		USB/WLAN		

Functional Block Diagram:



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Notes:

Dimensions are for reference only; Final dimensions are subject to change.

Mechanical Specifications:

Parameter	Value	Units
Output Connector	2.92 Female	
DC Bias	J30J-15PIN	
Size	180*120*23	mm
Weight	TBD	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+24V
ESD sensitivity (HBM)	Class 0, passed 150V

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	10G rms (15 degree 2KHz) endurance			
Shock(non operating)	50G for 12msc half sin wave			

Ordering Information:

Base Number	Description	Revision
TLFS-FMCW-14.55G-10.9G	FMCW RF Signal Source RF:9.1-20G Bandwidth:10.9GHz	Rev.1.1