

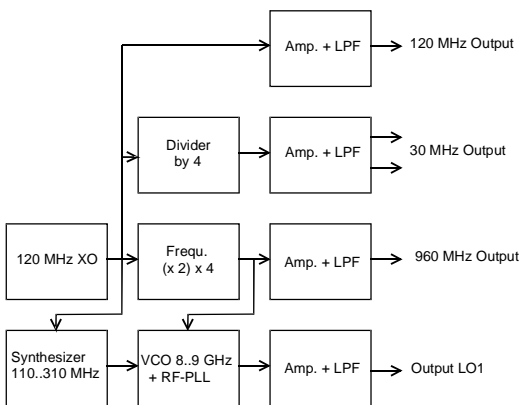
Features

- Fast hopping < 50 μ s
- exceptional phase noise
- additional outputs for receiver / transmitter

Typical Applications

This fast hopping synthesizer is for military applications where fast switching is required in connection with excellent phase noise and spurious purity, e.g. For radar applications, military communication systems, ECM or ECCM.

Functional Diagramm



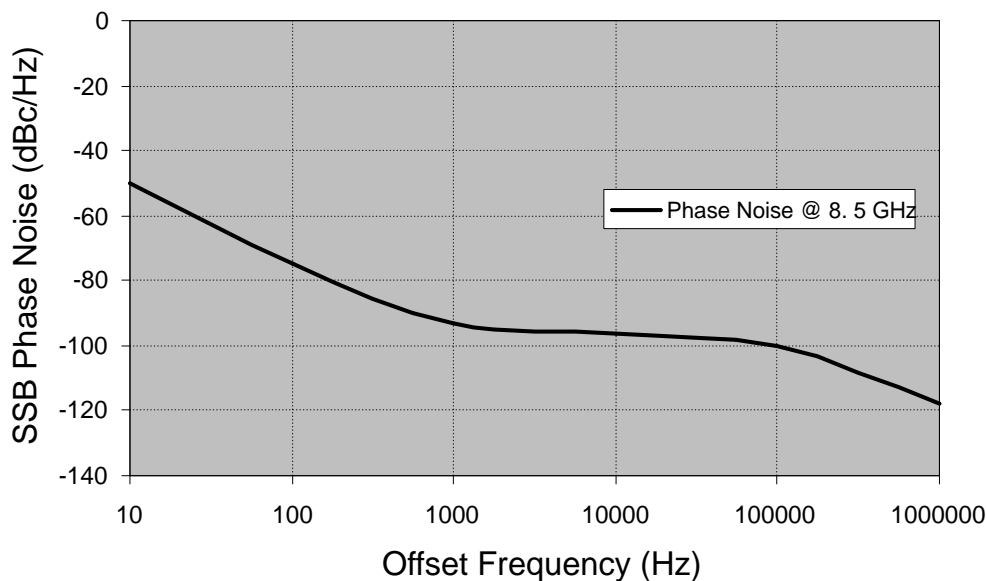
General Description

This synthesizer was developed to meet typical military application requirements. The racket construction allows the use of this synthesizer in airborne, shipboard and mobile systems.

Customized Products

For other frequencies or different specifications, please contact factory.

Typical SSB Phase Noise

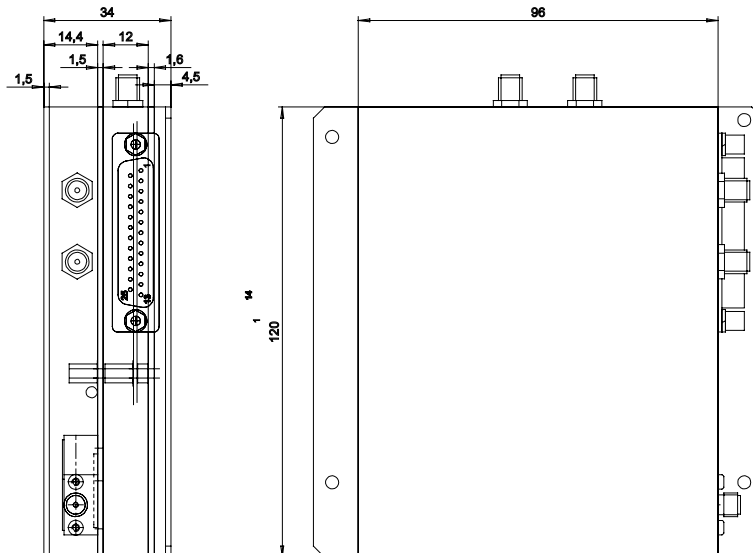


Electrical Specifications

Variable Output (LO1)	
Frequency Range	8120 .. 8920 MHz
Frequency Stability	± 50 ppm
Synthesizer Resolution	10 MHz
Switching Speed	100 µsec max
Phase Noise @ 8.5 GHz	-50 dBc/Hz @ 10 Hz -75 dBc/Hz @ 100 Hz -93 dBc/Hz @ 1 kHz -96 dBc/Hz @ 10 kHz -100 dBc/Hz @ 100 kHz -116 dBc/Hz @ 1 MHz
Spurious	< -50 dBc @ carrier offset < 1 MHz
Harmonics	< -30 dBc
Output Impedance	50 Ohm
Output Level	15 dBm
Power Variation over Temperature and Frequency	± 1.5 dB
Internal Reference	120 MHz
Channel Selection	TTL, BCD-Code
Temperature Range	-31 .. +85°C
Dimensions:	120 x 120 x 34 mm ³ + connectors
DC Power Supply	12.6 V ± 0.25V , ca. 800 mA 5 V ± 0.25V , ca. 400 mA
Connectors	RF SMA female DC D-Sub 25 pins male

Fixed Frequencies Outputs		
Frequencies	960 MHz 120 MHz 30 MHz	12 dBm 12 dBm 2 x 8.5 dBm
Power Variation over Temperature and Frequency	± 1.5 dB	
Spurious	-70 dBc	
Harmonics	-40 dBc	
Phase Noise	960 MHz 120 MHz 30 MHz	10 dB below LO1 30 dB below LO1 20 dB below LO1

Outline Drawing



Notes: