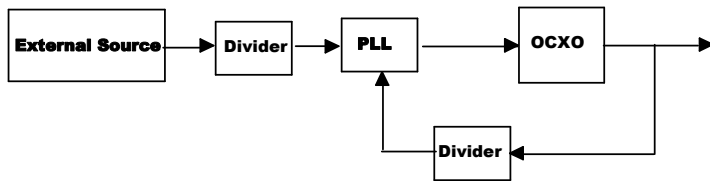


NR3620-EXT

Externally Locked OCXO Frequency Reference- Lock-in Amplifier

KEY FEATURES



Many systems require more than one frequency reference. The NR3620-EXT allow an existing frequency reference in a system to be multiplied or divided to meet a special need. Using a synthesized reference eliminates the need for a secondary independently locked reference and also prevents low frequency aliasing of two references that are related by an integer. The new reference is created through a Kalman filter that has frequency dividers on both the reference and the VCO outputs. This configuration allows considerable flexibility between the source and the output.

In addition to being able to create a different frequency, the unit can restore an existing reference amplitude and phase noise by locking a low noise OCXO to the degraded reference.

Phase Noise	
Offset	dBc/Hz
10	-125
100	-140
1K	-145
10K	-150

Product Highlights



Dual Integer Dividers

The dual integer dividers on the source and OCXO allow a broad range of locking multipliers.

Reference Recovery

Restore the amplitude and phase noise of an existing reference. When a reference must be used across a wide area with many drops, a lock-in amplifier allows amplitude and phase noise of the reference to be recovered while maintaining the long-term stability.

Technical specifications

Frequency Range	1 MHz to 100 MHz sine or 1 Hz to 10 MHz square	
	Contact factory to configure	
Lock-in amp at 10 MHz	Input >-7dBm, output 13dBm	
Power Requirements- modular	Three ranges ± (9 to 18, 18 to 36, 36 to 65) Vdc (ac adapter available) Power converter can be configured to provide > 500 volts isolation)	
Connectors	BNC	

Environmental and Mechanical

Operating temperature	0 to 50C non-condensing (extended temperature range available)	
Storage temperature	-40 to 70C	

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