ECHO

ULTRA LOW-NOISE MICROWAVE OSCILLATOR

The ECHO is an ultra-low phase noise microwave oscillator based on a room temperature sapphire loaded cavity. It offers unparalleled low phase noise in the X-band with outputs extendable to other frequency bands on request.

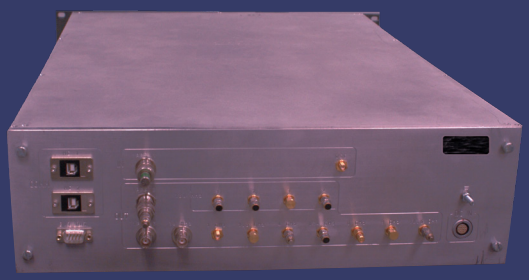

Image for indicative purposes only

KEY FEATURES AND BENEFITS

Ultra-low phase Noise

The high Q-factor of the sapphire loaded cavity allows phase noise that is orders of magnitude lower than commercially available alternate technologies.

Compact Form Factor

The entire unit fits into a 3U 19”rack enclosure with an easy to use front panel.

Offset Frequency	SSB Phase Noise at 9 GHz
1 Hz	-50 dBc/Hz
10 Hz	-93 dBc/Hz
100 Hz	-125 dBc/Hz
10 kHz	-168 dBc/Hz
100 kHz	-168 dBc/Hz

ECHO APPLICATIONS

Radar

The exceptionally low phase noise offers improved radar performance and opens up new frontiers in micro-doppler, counter-drone techniques and environmental monitoring.

Analog-to-digital conversion

Ultra-low phase noise translates directly to exceptionally low timing jitter for high performance analog-to-digital conversion and signal processing.

Test and measurement

The ECHO can be used to rapidly and confidently measure the phase noise of other oscillators.

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