

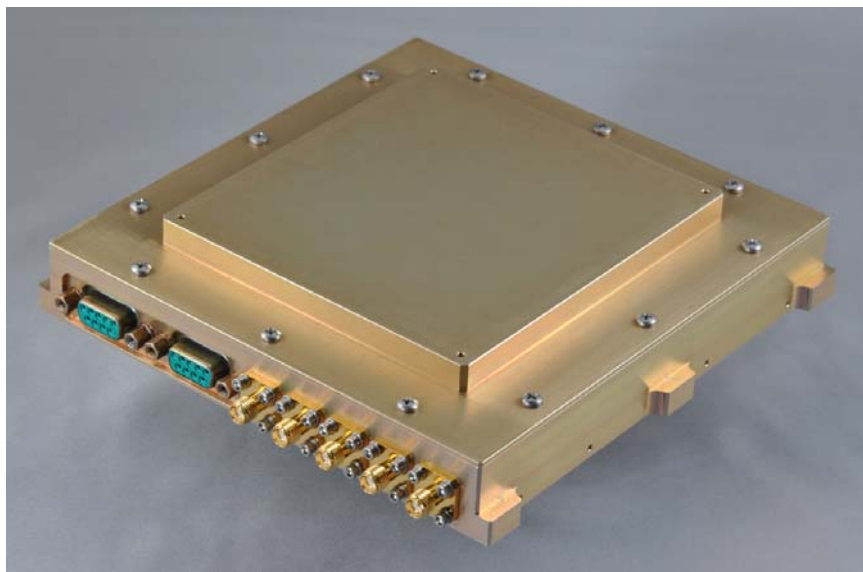


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**FOR IMMEDIATE RELEASE**

## **Jackson Labs Technologies, Inc. delivers Vibration-Insensitive, Ruggedized Rubidium Replacement Frequency and Timing Reference**

*“DROR” is a Vibration-Insensitive Rubidium Reference Replacement Oscillator designed to operate in harsh Environments with minimal power consumption, and at higher performance levels than Rubidium products.*



**LOS GATOS, Calif., May 18<sup>th</sup>, 2010** – Jackson Labs Technologies, Inc, a designer and manufacturer of cutting-edge gps, timing, and frequency equipment, today announced the availability of its breakthrough product DROR (Disciplined Rubidium Oscillator Replacement) 10MHz/1PPS Frequency and Timing Reference. The DROR time, frequency, and GPS-reference is a highly ruggedized, enclosed Global Positioning System Disciplined Oscillator (GPSDO) that conforms to numerous military standards, with specific emphasis on ultra low phase noise performance under extreme vibration and acceleration such as could be encountered in aircraft, tracked vehicles, and wheeled vehicles.

The DROR unit is optimized for operation in high-vibration and high-acceleration environments that require ultra-low phase noise performance and high stability under extreme conditions. The DROR may be used as a low phase-noise clean-up system when being supplied by an external 1PPS pulse, or it may be synchronized and calibrated by its own internal WAAS-enabled GPS receiver. DROR uses standard DB-9 and SMA connectors, can directly interface to vehicle 28V power busses, and is conformal-coated to withstand 100% humidity and condensation



DROR includes special circuitry for tight synchronization between an external noisy 1PPS reference and the internal OCXO-generated 1PPS pulses to better than 3ns on average. DROR allows optional shifting of the internal 1PPS pulse via software command in 1ns steps. The 1-day holdover stability of DROR is similar to Rubidium references, without the high initial, and ownership cost, the limited lamp lifetime, high phase noise, and the high power consumption that Rubidium references suffer from.

DROR contains an SC-cut, Double Oven Crystal Oscillator. Under vibration DROR provides the best performance possible for the following parameters: thermal stability, Allan Deviation stability, Phase Noise, g-insensitivity, ultra-low-holdover drift, and crystal jump-free performance as well as Stratum-1 frequency accuracy over wide temperature ranges. Through innovative new circuitry DROR achieves ultra-low phase noise even under full vibration.

DROR supplies two isolated 10MHz outputs that are phase-synchronized to its two 1PPS outputs with better than 2ns accuracy. DROR also contains an internal 50-channel WAAS-enabled GPS receiver that provides support for avionics systems through its integrated 3-axis gyro-accelerometers and -160dBm GPS tracking capability. Legacy Rubidium references have a typical power consumption of up to 18W or more. DROR power requirements are less than 4.9W steady-state, and only a single supply of between 15V to 32V is required. The ruggedized DROR enclosure size is 6.00 x 5.77 x 1.18 inches and weighs less than 1.3 lb, and is made of anodized aluminum.

For plug-and-play integration the unit can be monitored and controlled by an RS-232 port via industry standard SCPI-99 Commands (GPIB commands), and is capable of generating numerous NMEA-0183 output sentences for easy integration into existing infrastructure. With performance that far exceeds existing Rubidium references at a fraction of the cost, the DROR sets a new performance standard.

**FOR MORE INFORMATION VISIT US AT THE IEEE MTT-S 2010 IN ANAHEIM AT BOOTH # 612 ON MAY 25<sup>th</sup> to MAY 27<sup>th</sup> 2010**

**About Jackson Labs Technologies, Inc.:**

Located in Los Gatos, CA, Jackson Labs Technologies, Inc. is a privately held company that is setting new standards in timing and frequency generation for the engineering, test & measurement, broadcast, defense, and research markets. Jackson Labs Technologies, Inc.: The Next Generation of Timing & Frequency. To learn more, visit [www.jackson-labs.com](http://www.jackson-labs.com).