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FOR IMMEDIATE RELEASE

Jackson Labs Technologies, Inc. delivers GPSDO Frequency Reference with both 100MHz and 10MHz outputs

"FireFly-IIA-100MHz" is a Rubidium Frequency Reference replacement with 10MHz and 100MHz outputs, and built-in Distribution Amplifier



CAMPBELL, Calif., November 4th, 2009 – Jackson Labs Technologies, Inc, a designer and manufacturer of cutting-edge gps, timing, and frequency equipment, today announced the availability of its breakthrough product FireFly-IIA-100MHz Frequency Reference. FireFly-IIA-100MHz is an extremely small Global Positioning System Disciplined Oscillator (GPSDO) that has various 100MHz outputs, as well as several 10MHz outputs, Distribution Amplifiers, and a high-performance 50-channel GPS receiver with -160dBm tracking capability. All outputs are frequency and phase-synchronized to UTC via the GPS system, and thus provide *Better-Than-Cesium™* long-term performance. By providing both a 100MHz as well as 10MHz reference in one compact board, the unit is a good fit for Ultra-Low-Phase-Noise up-conversion systems as used in Radar and Satellite communication equipment.

FireFly-IIA-100MHz is backwards fit, and function compatible to the FireFly-IIA GPSDO, and offers higher performance, and additional functionality in the same footprint. The FireFly-IIA-100MHz as a bonus provides special support for airborne applications by providing avionics systems with a 3D-Velocity Vector, Attitude/Tilt information, Speed, Heading, Height (both MSL and GPS Height), Position, Time, Date, Frequency, Time-Stamping, and Health information.

At only 1.5 x 4.0 Inches small, FireFly-IIA-100MHz provides Stratum-1 long-term performance of better than 5 parts per Trillion (5E-012) averaged over 24 hours with various options for



temperature range, thermal stability, as well as g-sensitivity, and shock/vibration insensitivity. FireFly-IIA-100MHz has a built-in 100MHz, 2-port distribution amplifier with +13dBm Sine Wave outputs, as well as 10MHz Sine Wave and LVDS outputs. FireFly-IIA-100MHz also supports 5 differential 100MHz LVDS and CMOS outputs.

FireFly-IIA-100MHz provides an OCXO-sourced 1PPS LVDS output that is phase synchronized to better than 30ns rms to UTC (typ. <10ns rms). The unit can be monitored and controlled by an RS-232 port via standard SCPI Commands, and is capable of generating various NMEA-0183 output sentences for easy integration into existing infrastructure. With a phase noise floor of better than -160 dBc/Hz at 100MHz, superior spurious-suppression, and very low jitter (<400fs rms) at a power consumption of <4W, the FireFly-IIA-100MHz sets a new performance standard.

FireFly-IIA-100MHz is also available with a Ruggedized, extended temp-range, low-g Oscillator option for demanding applications. For mission-critical applications FireFly-IIA-100MHz provides a direct redundancy feature allowing multiple units to be daisy-chained to each other for increased reliability.

Jackson Labs Technologies, Inc. President Said Jackson noted that the FireFly-IIA-100MHz is an especially good fit for Microwave communications and Radar applications: "FireFly-IIA-100MHz's built-in 10 and 100MHz distribution amplifiers allow it to directly drive up to 14 external devices without the need for an external splitter or distribution amplifier. FireFly-IIA-100MHz's Ultra Low Phase Noise floor of below -160 dBc/Hz at 100MHz and extremely good close-in Phase Noise performance opens up a vast number of applications with up-conversion to Microwave frequencies, and require extremely high Frequency Accuracy as well as Ultra Low Phase Noise."

About Jackson Labs Technologies, Inc.:

Located in Campbell, 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.