A Division of Voxtel Inc.

15985 NW Schendel Ave. Ste.200 Beaverton, OR 97006 Phone: 971-223-5646 www.voxtel-inc.com



## FOR IMMEDIATE RELEASE

Contact: Joe LaChapelle Tel: 971-223-5646 x119 Email: joel@voxtel-inc.com

## Voxtel Raises the Bar Again with the ROX<sup>™</sup> Rx Series Lowest Cost, Best Performance Eye-Safe LRF Receivers



## Delivering cascading improvements in performance and cost

**Beaverton, Ore., May 1, 2015** Voxtel, Inc. announces enhanced performance and lower price points in its ROX<sup>TM</sup> Rx series of eye-safe rangefinder receivers (Rx). Compared to the previous generation of industry-leading ROX receivers, the new 100-MHz, 200-µm model (m/n <u>RVC1-NIAC</u>) delivers 50% improvement in sensitivity at half the cost. To enable Voxtel customers to produce ranging systems that are smaller and less expensive than others, Voxtel designed the ROX Rx series of LRF receivers for high sensitivity with low false alarm rates.

"The latest version of our ROX Rx continues to raise the bar enabling our customers to use lower power eye-safe lasers in small, compact systems," says Voxtel President George Williams, "and when system integrators can incorporate low-power lasers, entire systems shrink in size, weight, power and cost. Our product improvements enable a new class of rangefinders that are safer to use."

The ROX Rx series of rangefinder receiver integrates Voxtel's proprietary high-performance InGaAs avalanche photodiodes (APDs), custom-designed CMOS application-specific integrated circuits (ASICs), and programmable processing circuits to provide flexible system integration, programmable functionality, and reliable performance, all in a small TO-8 package.

Compared to standard photodiode detectors (PIN detectors), Voxtel's high-gain, low-noise APD provides half the excess noise and superior avalanche gain—up to M = 25—allowing superior range and low false alarm rate. With a 0.5 nW noise equivalent power (NEP), optimal sensitivity is achieved, with linear dynamic range of 25 db, total dynamic range of 70 dB, and 100 mW of overload protection.

Easy to operate and integrate, the ROX Rx technology integrates custom ASICs and programmable features that allow the APD gain to be stabilized over the -40 °C to 80 °C temperature range, and allowing performance to be optimized without the use of thermoelectric cooling. The multiple user-programmable or factory conditions also allow automatic optimization of APD sensitivity over the wide temperature range, or operation in multiple modes for various concepts of operation. The programmable gain and range-variable threshold features allow for the ROX Rx to be quickly configured for new applications and operating conditions. Time-over-threshold features reduce range walk error.

The control capability of the ROX Rx technology includes damage protection of up to 6 MW/cm<sup>2</sup> of peak power, and its highly integrated design makes it robust against gun shock and other harsh operating environments.

## About Voxtel, Inc.

Founded in 1999, Voxtel, Inc. of Beaverton, Ore., is a leading supplier of <u>3D imaging systems</u>, <u>eye-safe lasers</u>, and <u>avalanche photodiode (APD) detectors</u> and <u>focal plane arrays (FPAs)</u>.

For more information, visit <u>www.voxtel-inc.com</u>, call 971-223-5646 x119, or email joel@voxtel-inc.com.