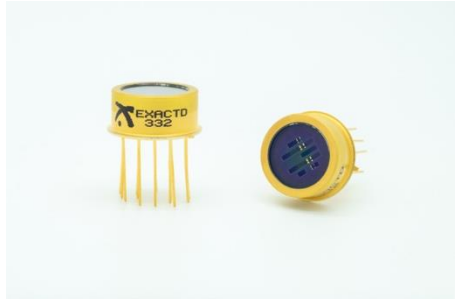




Excelitas Technologies Debuts EXACTD-332 Sensor for Laser Warning Systems

Unique Optical Sensor Solution Integrates Laser Threat Recognition and Angular Resolution Capabilities in a TO-8 Package



WALTHAM, Mass., September 14, 2021 – [Excelitas Technologies® Corp.](#), a leading industrial technology manufacturer focused on delivering innovative, market-driven photonic solutions expands its EXACTD® series of laser warning detectors with its new compact [EXACTD-332 sensor](#) for airborne and land vehicles laser warning systems. Featuring a unique combination of photodiodes with a high-precision optical system, EXACTD-332 provides an angle-of-arrival (AoA) resolution of ± 6 degrees and

spectral sensitivity from 500 nm to 1650 nm for the detection of all laser threat applications, including target designation, laser range finding, SAL laser guidance and for any active laser on electro-optics payload.

Designed to detect and provide precise AoA information from direct and indirect scattered light, the EXACTD-332 module makes use of 5-element Si and InGaAs detector arrays assembled in a sandwich configuration, in conjunction with a 3-bit digital Gray code mask used to convert the incident laser beam AoA into a 3-bit digital pattern. Each module features two isolated arrays providing individual high- and low-sensitivity channels.

The first array exhibits high quantum efficiency over the full wavelength range, while the optical signal is attenuated optically before reaching the second array by about 15 dB, further extending the dynamic range for detection of high-power laser pulses. The 3-bit Gray code design allows encoding of incident AoA with an angular resolution of $\pm 6^\circ$, in either azimuth or elevation depending on the module's orientation, over the $\pm 45^\circ$ field-of-view (FoV). Three reference channels, illuminated for all incident angles, are provided in each array for baseline signal level determination.

"We are excited to add the EXACTD-332 to our leading series of EXACTD laser warning detectors, as it delivers a unique solution that integrates all the optical sensing for laser warning with angular resolution in a TO-8 package," said Eric Desfonds, Senior Product Line Manager at Excelitas.

Product features include:

- Spectral sensitivity range of 500 nm – 1650 nm
- 3-bit design for precise AoA encoding
- $\pm 6^\circ$ AoA accuracy – in either azimuth or elevation
- FOV is $\pm 45^\circ$ for both azimuth and elevation angles
- Low- and high-sensitivity channels for wide dynamic range
- Two reference channels provided in each photodiode array for baseline signal level determination
- Manufactured using fully-automated robotic technology



Denis Boireau, Director of Business Development at Excelitas commented, "The EXACTD-332 becomes the core of high-precision circuitry enabling troops more time to deploy counter-measures, perform evasive maneuvers, or aim precisely to fight back."

The new EXACTD-332 module will be featured at Excelitas booth # H2-904 at [DSEI](#), September 14 – 17, 2021 at ExCeL London. For additional information and technical specifications on EXACTD-332, visit <https://www.excelitas.com/product/exactd-332-angle-arrival-photodiode-module>.

#

About Excelitas Technologies

Excelitas Technologies® Corp. is a leading industrial technology manufacturer focused on delivering innovative, market-driven photonic solutions to meet the illumination, optical, optronic, imaging, sensing and detection needs of our OEM and end-user customers. Serving a vast array of applications across biomedical, scientific, semiconductor, industrial manufacturing, safety & security, consumer products, defense and aerospace sectors, Excelitas stands committed to enabling our customers' success in their many various end-markets. Our team consists of more than 7,000 professionals working across North America, Europe and Asia, to serve customers worldwide.

Connect with Excelitas on [Facebook](#), [LinkedIn](#), [Instagram](#) and [Twitter](#), or visit <http://www.excelitas.com> for more information.

Excelitas®, Excelitas Technologies® and EXACTD® are registered trademarks of Excelitas Technologies Corp. All other products and services are either trademarks or registered trademarks of their respective owners.

PR Contacts:

Defense & Aerospace Marketing Manager
craig.taylor@excelitas.com
+44 1745 588002

Sunie Davis
Defense & Aerospace, Executive Assistant
sunie.davis@excelitas.com
+1 937-353-2268

Cheryl Reynhout or Jill Anderson
On behalf of Excelitas Technologies Corp.
SVM Public Relations
excelitas@svmmarcom.com
+1 (401) 490-9700