



Applied Optoelectronics Announces Narrow Linewidth Laser for automotive LIDAR

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SUGAR LAND, Texas, March 30, 2020 (GLOBE NEWSWIRE) -- Applied Optoelectronics, Inc. (Nasdaq: AAOI), a leading provider of fiber-optic access network products for the internet datacenter, cable broadband, telecom and fiber-to-the-home (FTTH) markets, today announced the release of a high power and narrow linewidth laser specifically designed for Light Detection and Ranging (LIDAR) applications, particularly for automotive use.

Current automotive LIDAR systems are based on near infrared lasers, however these lasers are not eye safe and therefore are limited in terms of emitted power. This power limitation, in turn, restricts the effective sensing range of the LIDAR system. AOI's laser operates at longer wavelengths near 1550-nm where eye-safe emission limits are much higher and therefore detection distances are longer, making them better suited for real-world automotive sensors.

Combining high optical output power with narrow linewidth further increases the detection range of a LIDAR system by increasing the coherence length of the laser output compared to similar lasers with wider linewidth. The lasers are intended to be used in Frequency-Modulated Continuous Wave (FMCW) LIDAR systems, which have better noise rejection compared to the more common amplitude modulated LIDAR systems available today.

"AOI's expertise in semiconductor laser design and production has enabled us to offer this innovative narrow-linewidth laser," said Dr. Fred Chang, AOI's Senior VP and GM. "The current automotive LIDAR systems have limitations imposed by the available lasers, and AOI's new 1550-nm eye-safe laser will enable advanced FMCW LIDAR systems with improved detection range and accuracy, which are critical to advanced autonomous vehicle technology."

The new lasers are available for customer sampling immediately.

For more information, please contact the AOI sales team at sales@ao-inc.com.

About Applied Optoelectronics

Applied Optoelectronics Inc. (AOI) is a leading developer and manufacturer of advanced optical products, including components, modules and equipment. AOI's products are the building blocks for broadband fiber access networks around the world, where they are used in the internet datacenter, CATV broadband, telecom and FTTH markets. AOI supplies optical networking lasers, components and equipment to tier-1 customers in all four of these markets. In addition to its corporate headquarters, wafer fab and advanced engineering and production facilities in Sugar Land, TX, AOI has engineering and manufacturing facilities in Taipei, Taiwan and Ningbo, China. For additional information, visit www.ao-inc.com.

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