

# LASER COMPONENTS Invests in R&D and Production Plants for IR Components

PbS and PbSe detectors, pyroelectric detectors, InGaAs PIN detectors, and IR emitters are manufactured in the US by Laser Components. The company has announced significant investments in its production facilities.



ASER COMPONENTS has announced the significant expansion of its R&D and its production of IR components. With the acquisition of Microwatt, Inc., pyroelectric detectors can be introduced to the market immediately and at an extremely high quality. Microwatt, Inc., which operates out of Florida, changed its name to Laser Components Pyro Group, Inc. in the summer of 2014. Laser Components Detector Group, Inc. has also expanded: They now manufacture not only APDs but InGaAs PIN diodes, PbS and PbSe detectors, and IR emitters as well. Read more about the background of the Laser Components Group below.



"As many core IR technologies as possible: that's our goal for meeting our customers' needs." Patrick Paul. CEO, LC Germany

Patrick, why does the Laser Components Group manufacture such a broad spectrum of IR components? Patrick Paul: Since its founding in

1982, Laser Components has specialized in IR components. Its collective know-how is extensive. Customers now profit from our in-house production facilities worldwide.

We have had the luxury of bringing aboard specialists that are more familiar with the market than many others and implement their expertise in R&D and production.

#### "IR detectors with different technologies."

Why do you offer competing IR technologies?

Patrick Paul: The fact that we offer IR detectors that implement different technologies makes it possible for our customers to always find their ideal solution quickly. Gas measurements, for example, can be carried out using both PbS/PbSe and pyroelectric detectors. Depending on what exactly needs to be measured, one technology is more ideal than the other. The advantage of individualized assistance can be offered by very few other manufacturers: we not only offer this help but also manufacture custom products.

Gary, you are the managing director of LC USA, Inc. Which advantages do the new production facilities

Gary Hayes: The market for IR components in the U.S.A. is large. The possibilities are much greater with our own production facilities. When it is necessary, we are joined by the R&D department during customer visits to closely assist in the development of new products - a win-win situation for all.

Dragan, you are the managing director of the LC Detector Group,

which has experienced the largest expansion in the past few months. The production of PbS and PbSe detectors was just made known today. Are these products already available?

Dragan Grubisic: Yes. The first tests by selected customers have been completed. The quality is convincing and production has started. The Arizona State University, ASU, has enabled us to become the technology leader in PbS/PbSe manufacturing. At ASU we have developed all these new detectors and inventive fabrication techniques. The combination of both a customized process and automation has led to PbS and PbSe detectors that feature high



"We can develop custom products quickly, effectively, and at reasonable prices."

Gary Hayes, CEO, LC USA

sensitivity. We can truly say that we have advanced the state of the art.

InGaAs PIN photodiodes and IR emitters are also both manufactured at your production facilities.

Dragan Grubisic: The first tests for InGaAs photodiodes developed by our team were performed in 2012. Our detectors have a high sensitivity at shorter wavelengths (< 1000 nm), feature an eliminated off-area response, and are

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"Our products feature the highest detectivity I have ever seen for PbSe detectors."

Larry Johnson, LC Detector Group



linear at high incident power densities. We will be introducing multiplexed linear arrays at the LASER. World of Photonics trade show. We also offer a free workshop, which is open for registration.

Alan, you are a renowned expert in the area of pyroelectric detectors. We now meet again at LC. Tell us more about it!

Alan Doctor: What exactly would you like to know? We develop and manufacture pyroelectric detectors

based on two materials. DLaTGS has been used to date for FTIR applications that require an uncooled detector. LTO is commonly used in the industrial field in gas analysis or flame detection; however, it is also used in medical technology in the monitoring of anesthesia. CM and VM configurations are available for both materials.

"Our advantage: We have an ISO-certified assembly and test facility that is well equipped with both testing hardware and software."



LC Detector Group

#### "Excellent customer support and application assistance."



"We will develop everything for pyroelectric detectors that is physically possible."

Alan Doctor LC Pyro Group

We provide excellent customer support, including the development of nonstandard devices and application assistance. Our pyros feature a very high D\* at higher frequencies for FTIR and other more esoteric applications.

### Get More Information!



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