

News release

trinamiX premieres next-generation handheld NIR spectrometer at LASER World of PHOTONICS 2023

22 June 2023 – Ludwigshafen, Germany. trinamiX GmbH, a leading provider of mobile spectroscopy solutions, unveils its next-generation handheld NIR spectrometer at LASER World of PHOTONICS in Munich: trinamiX PAL Two. The new device combines the latest technological breakthroughs at trinamiX with extensive insights from industry experts, customers, and partners. With trinamiX PAL Two, the company introduces a future-proof spectrometer that has been designed around three core pillars: versatility, robustness, and convenience.

The new spectrometer complements trinamiX's existing Mobile NIR Spectroscopy Solutions. Bundling innovative hardware with ready-to-use calibrations that are tailored to specific demands, trinamiX already caters to an extensive range of industries with applications for improved decision making.

Versatility: Broad wavelength range for a multitude of applications

trinamiX designed its new spectrometer to cover a broad wavelength range from 1300 nm to 2350 nm and perform at a high signal-to-noise ratio. This way, customers can rely on a measurement accuracy that comes close to the performance of long-established benchtop solutions without compromising on the width of applications.

Robustness: Reliable performance in any condition

The robustness is another key feature of trinamiX PAL Two. The spectrometer reliably operates even in harsh in- and outdoor conditions as it is protected against dust, moisture, and minor shocks thanks to a rugged design. The detector window is made of sapphire glass ensuring a scratch-resistant surface when handling large amounts of samples.

Convenience: Lightweight comfort in one hand

Finally, trinamiX placed a strong emphasis on user convenience resulting in the ergonomic and intuitive design of the spectrometer. trinamiX PAL Two resembles a scanner that fits comfortably into the user's hand, allowing for easy handling of device and sample. The design also reflects the versatile applications that are enhanced with different accessories and measurement set-up options. The analysis results and most relevant information of each sample appear instantly on an LCD screen facing the user. Additional information becomes available on the Bluetooth™-connected trinamiX smartphone app and the cloud-based customer portal. A lightweight at 550 grams, the spectrometer carries out up to 2,000 measurements before it is recharged.

"The introduction of trinamiX PAL Two is yet another important step on our mission to offer mobile spectroscopy to everyone", says **Christian Nitschke, Director IR Sensing & Spectroscopy**

Solutions Business at trinamiX. “I’m excited that with the latest addition to our solution portfolio, we’ll be putting a powerful companion into the hands of customers across the world.”

In addition to plug-and-play industrial applications, expert users have also been leveraging the flexibility of trinamiX’s handheld spectrometers in laboratory environments. With the introduction of trinamiX PAL Two, the company will also be launching a solution for precise data collection and model creation that will extend its offering for laboratories and research institutes.

trinamiX has a long-standing experience in successfully developing and marketing miniaturized NIR spectroscopy solutions based on trinamiX’s own patented near-infrared detectors. Over the years, trinamiX has built up extensive in-house spectroscopy and data science know-how with passionate teams around leading optical and application engineers. In addition, trinamiX has been leveraging a unique spectroscopy ecosystem as it collaborates with renowned laboratories, research institutes and companies from different industries to develop solutions for reliable on-the-spot decision making.

From June 27-30, trinamiX invites visitors of LASER World of Photonics in Munich to experience the first public demos of its next-generation spectrometer trinamiX PAL Two at booth #520 in hall A3.

For more information, download our factsheet and sign up for updates on trinamiX PAL Two here: trinamiXsensing.com/PalTwo

Media contact

Steven Meyers

Phone: +49 160 94630363

E-mail: steven.meyers@trinamix.de

About trinamiX

trinamiX GmbH develops cutting-edge biometric and mobile NIR spectroscopy solutions, which are used in both consumer electronics and industrial designs. The company’s products enable humans and machines to better capture data with the goal of understanding the world around us. This results in improved decision making as well as stronger biometric security. trinamiX, based in Ludwigshafen (Germany), was founded in 2015 as a wholly owned subsidiary of BASF SE. The company employs over 220 people worldwide and holds more than 500 patents and patent applications.