

Company profile trinamiX GmbH

About trinamiX

trinamiX GmbH is a leading supplier of 3D and IR detection solutions based on patented technology originally developed by BASF SE, the world's leading chemical company. As a unique, wholly-owned subsidiary of BASF, trinamiX is also based in Ludwigshafen and was founded in 2015 as an operationally-independent company with complete access to the resources, expertise and experience of the entire BASF Group. Led by Dr. Ingmar Bruder, the company now has several offices worldwide and serves customers across multiple market segments.

trinamiX has developed an entire suite of different sensor technologies with a singular purpose: to enable humans and machines to capture and understand the world for improved decision-making and security. With a team of more than 100 experts across different fields ranging from algorithmic design to chemistry and optics, trinamiX is uniquely qualified to leverage its dozens of patents into a host of vertical markets that can best take advantage of the company's unique value proposition.

Find out more about trinamiX GmbH at www.trinamiXsensing.com

3D sensing with beam profile analysis

Our 3D sensing systems determine distance from beam profile properties and work with wavelengths from visible to infrared. trinamiX 3D imaging extracts 3 data streams from a single camera system: a 2D IR image, a 3D depth map and most uniquely - material classification. It can be used for bin picking, robot vision and object recognition. trinamiX also developed a fiber optic sensor which is the world's first system to measure absolute distance through optical fibers.



3D imaging system

Infrared sensing with Hertzstück™ detectors

Our lead salt detector Hertzstück™ is a short-wave infrared semi-conductor sensor for 1 – 5 μm wavelength. For Hertzstück™ IR detectors we have developed a new, patent pending encapsulation technique: Hertzstück™ is the first bare chip lead salt photoconductor that can be wire-bonded to printed circuit boards. The product portfolio comprises of bare chip detectors, TO packaged sensors as well as arrays.



Hertzstück™ bare chip
infrared sensors



Managing Director Dr. Ingmar Bruder

Managing Director

Dr. Ingmar Bruder is the Managing Director of trinamiX GmbH since it spun out of BASF SE in 2015. Previously he was a researcher for organic photovoltaics at BASF SE. He made the discovery that built our technological basis.

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