**About trinamiX GmbH**

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 240 people worldwide and holds more than 600 patents and patent applications.
www.trinamiXsensing.com

**About trinamiX Consumer Spectroscopy**

The innovative trinamiX Consumer Spectroscopy harnesses the power of Near-Infrared (NIR) Spectroscopy to provide users with non-invasive biomarker measurements on their skin, enabling numerous applications with the potential to revolutionize the way consumers use mobile devices. Through the proprietary spectroscopy module, smart algorithms, and a user-friendly app, the smartphone can become a hub of health insights. trinamiX Consumer Spectroscopy seamlessly integrates into mobile devices, letting users monitor selected aspects of their health independently and reliably. The comfort, ease-of-use, and safety of non-invasive monitoring enabled by trinamiX Consumer Spectroscopy could empower individuals to take control of their wellbeing, whether it be in skin health, nutrition, or other everyday use of biomarkers measurement. This groundbreaking technology presents opportunities for innovation across a variety of additional categories and industries. Thanks to an open API, OEMs, consumer brands, and developers around the world can leverage Consumer Spectroscopy for the first time.

More technical specifications can be found in our product brief.

**About the technology: NIR Spectroscopy**

trinamiX Consumer Spectroscopy is based on Near-Infrared (NIR) spectroscopy in the wavelength range of 1 – 3 µm. Near infrared (NIR) spectroscopy is an optical, contact-based analysis method, which is established across industries. Through NIR spectroscopy we can track unique features of different kinds of material. By shining infrared light onto an object, the light transcends the object's surface and causes the underlying molecules to vibrate. While some of the light is absorbed, part of it is reflected by the object and captured by the optical sensor in the spectrometer. Here it is transformed into an electrical signal with a unique pattern called spectrum. The spectrum is completely unique to the material – like a fingerprint. Special algorithms process this information in order to further translate this complex signal into an actionable recommendation for users (chemometrics).