### trinamiX

A brand of BASF – We create chemistry

# Where science meets beauty

trinamiX Consumer Spectroscopy for skin and hair care applications



Bring lab-proven technology in the hands of consumers

#### The benefits

## We enhance skin analyses by utilising NIR spectroscopy

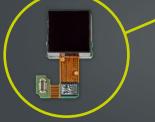


- Precise
   Reliable results through
   high repeatability
- Specific
  In-depth insights
  on molecular level
- Comprehensive
  For over-makeup
  measurement
- ContactlessShort-distancemeasurements

#### Our key to miniaturization

## An in-house developed fully functional spectrometer

- Patented IR sensor chip Sensitivity range 1 – 3 μm
- Light source
  Broad wavelength range
- ✓ Light filters CWL¹ and FWHM² selectable



Calibration
User-friendly self-calibration

We partner with leading tech companies:

LUMILEDS Qualcomm VIAVI

FWHM = full width half maximum

#### Revolutionary small form factor

# We are pioneering the miniaturization of NIR spectroscopy

trinamiX is taking NIR spectroscopy a huge step further by seamlessly integrating the proven technology into a smartphone.

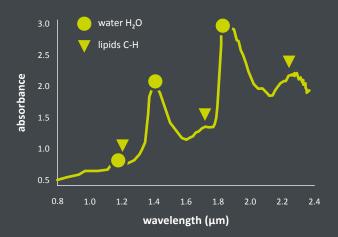


We provide a fully functional spectrometer in a revolutionary small form factor, that comes together with chemometrics software and allows for integration into various consumer or commercial devices.

#### About NIR spectroscopy

#### Making the invisible visible

trinamiX Consumer Spectroscopy uses near-infrared (NIR) spectroscopy, a method for analyzing organic materials. Infrared radiation with a wavelength of  $1-3\,\mu m$  is used to obtain information about the chemical composition of a sample. The light is absorbed, scattered, and reflected as it passes through the sample. This produces a characteristic spectrum, which is then compared with reference spectra to draw conclusions about the concentration or presence of certain components.



Near-infrared (NIR) sprectroscopy utilizes the molecular characteristics of relevant biomarkers such as water and lipids to provide accurate and reliable information about hair and skin conditions. The direct measurement on a molecular level enables the simultaneous but independent assessment of different biomarkers.

#### Flexible solution

## Integration into any beauty tool

The trinamiX Consumer Spectroscopy reference design is available for integration into smartphones and other consumer devices. Please reach out to us to discuss your specific application requirements in more detail.



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#### **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.