



PHARMA SECURITY

WITH MOBILE NIR SPECTROSCOPY SOLUTIONS

Professional analysis and quality control along the value chain

Quality Control

Analysis of material composition to identify counterfeits at every point along the supply chain.

Mobile

The measurement can easily be done by a pocket-size and portable device.

Ready-to-use

The device can be used right away without a cumbersome installation or training.

Easy

The sensor scans through transparent plastic bags or blister packaging.

Award-winning and patented technology

Fast

The results of the analysis are shown within seconds on the mobile app (iPhone/Android).

Reusable

Unlimited number of tests with one device.

Individual

Customized solution based on individual chemometrical data models.

Affordable

Laboratory accuracy level performance at a fraction of the costs.

Spectral Engines' solution provides pharmaceutical companies with efficient authentication of their products at any point in their supply chain, from manufacturing to distribution or practically anywhere in the field. This enables continuous manufacturing and real-time release testing.

Spectroscopy as smart material sensing technology

Near-infrared spectroscopy is used to study the unique features of a material by shining a specific light on them. The materials reflect a unique pattern, like a fingerprint. Spectroscopy makes these fingerprints visible. It allows the identification, differentiation, condition monitoring and quality assurance of substances.

Infrared spectrometers are already in widespread use, thanks to their great accuracy and flexibility. Our solution combines a pocket-sized near-infrared sensor with connectivity for mobile apps and cloud-based reference libraries with machine learning algorithms. This extremely powerful tool enables you to create your own unique material scanner.



Material analysis in a blink of the eye

1. After placing the measurement object on the NIRONE sensor, the sample is illuminated and the spectrum recorded.
2. The mathematical models analyze the spectrum and identify the material.
3. The result is immediately displayed in the app, and additional online information can be accessed.

About the NIRONE Solution

| Weight | Battery | Sensor Range | Storage |
|--|-----------------|---------------------------|---|
| 157g 0.35 lbs | 10 hours | 1.55 – 1.95 μm | Data stored in a safe cloud environment |
| Size | Interfaces | Models | Transfer |
| 80 x 80 x 28 mm 3.15 x 3.15 x 1.10 inch | USB & Bluetooth | In-house developed | Data transfer end-to-end encrypted |

About Spectral Engines

We are an international IT company specializing in MEMS-based near-infrared spectral measurements - an innovative technology used, for example, for the rapid identification of a wide range of materials.

Spectral Engines is part of the Nynomic Group and combines the best of both worlds: the dynamics of a young company with the security of an established technology group in the background.

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MEMBER OF THE NYNOMIC GROUP