



# ANTI-COUNTERFEITING

## WITH NIRONE MOBILE NEAR-INFRARED SPECTROSCOPY SOLUTIONS

### Professional analysis and quality control along the value chain

#### Quality Control

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

#### Mobile

Active ingredient concentrations can be easily measured 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.

The Spectral Engines' NIRONE anti-counterfeit solution enables pharmaceutical companies efficiently authenticate their products at any point of their supply chains from manufacturing to distribution or practically anywhere in the field.

### 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.

## Spectroscopy as smart material sensing technology

Each material has a unique fingerprint that identifies it. Spectroscopy makes those fingerprints visible. It allows the identification, differentiation, condition monitoring and quality assurance of substances.

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 Spectral Engines

Spectral Engines, part of the Nynomic Group, is an international company specializing in the development and manufacture of electronics and sensor systems for spectral measurement. In close cooperation with our customers, we develop and manufacture high-end spectroscopy systems and components for a wide range of applications. The company is located in Steinbach in the immediate vicinity of Frankfurt a.M. and in Helsinki.

### About the NIRONE Solution

Weight	Battery	Sensor Ranges	Storage
157g   0.35 lbs	10 hours	5 different wavelengths	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

SPECTRAL ENGINES® GMBH  
Weißkirchener Str. 2-6  
61449 Steinbach, GERMANY  
sales@spectralengines.com

[www.spectralengines.com](http://www.spectralengines.com)

Watch NIRONE Anti-counterfeiting video:  
<https://youtu.be/t1konAOrMyc>

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