



# ANTI-COUNTERFEITING

## WITH MOBILE NIR SPECTROSCOPY SOLUTIONS

### Verification of branded products along the supply chain

#### Mobile

One-site remote authentication via pocket-size and portable device.

#### Non-destructive

Optical reading requires no sample preparation and does not alter the product in any way.

#### Fast

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

### Award-winning and patented technology

#### User friendly

Easy to use, without extensive knowledge or training

#### Individual

Customized solution based on individual chemometrical data models.

#### Affordable

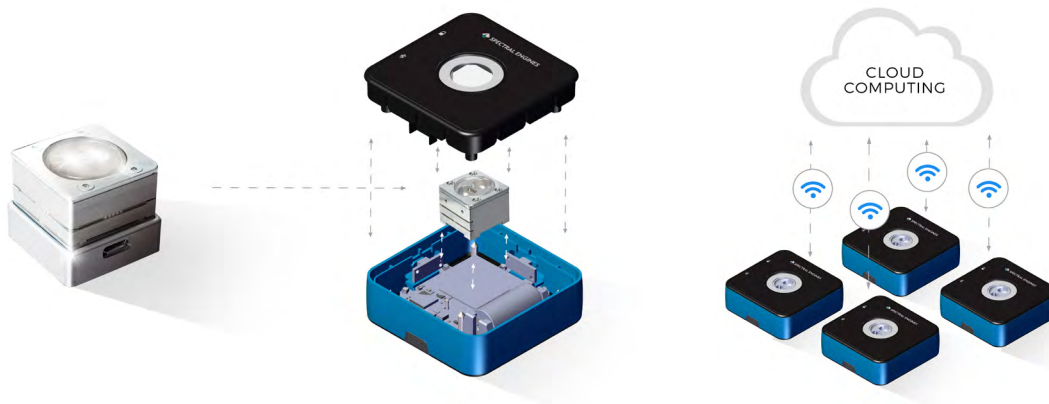
Laboratory accuracy level performance at a fraction of the costs.

Spectral Engines' technology enables the fast and accurate collection of reference data for a wide range of materials. With the portable device, the material can be measured anytime, anywhere and compared with the reference data. This allows companies to not only verify their products at any point in the supply chain from manufacturing to distribution, but also detect gray markets and fraudulent returns.

## 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, 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 scanner, 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 connected app, and additional online information can be accessed.

### 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 pharmaceuticals and other branded products.

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.

### About the NIRONE Scanner

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)

 **SPECTRAL ENGINES**  
MEMBER OF THE NYNOMIC GROUP