

CREATE A FUTURE OF POSSIBILITIES



Liquid Scanner

A multi-purpose Material Scanner for the Analysis of Liquids

THE SMART SENSING REVOLUTION

START THE NEXT GENERATION OF SMART LIQUID SENSING

Introduction

Near Infrared Spectroscopy (NIRS) is a non-destructive and cost effective analysis method for material identification and quality control at any point of the supply chain. It is used for liquids, powders, granules and pills.

A transmission setup is the optimal method for liquids, since the samples are irradiated in a defined layer thickness. The transmitted light contains spectral information with a particularly high signal yield. This makes it easy to identify and quantify active ingredients and excipients without alter the sample in any way.

Technology

Spectral Engines' Liquid Scanner uses a patented Micro-Electro-Mechanical System Fabry-Perot Interferometer (MEMS FPI), enabling fast, accurate and reliable measurements.

The scanner works at all NIRONE Sensor wavelength ranges, which means great sensitivity and specificity in material sensing applications and can easily be operated via mobile app as well as via PC.

From Measurement to Information

In addition to material measurements, our products can also be used to create a globally accessible reference database. Customers can carry out the associated tasks themselves or utilise our data science solutions and services in full or in part.

For customers who are interested in a private label solution and want to move to market quickly, there is the Spectral Engines Scanner Platform: a turnkey solution that enables the rapid development of new innovative liquid detection applications. It offers complete instrumentation, communication methods, a cloud platform, the creation of a reference library and the implementation of algorithms.

Dimensions | Weight

115 mm (W) x 125 mm (L) x 47 mm (H) | 0,5 kg
4.53 in (W) x 4.92 in (L) x 1.85 in (H) | 1.1 lbs

Wavelength Ranges

1.35 – 1.65 μm | 1.55 – 1.95 μm
1.75 – 2.15 μm | 2.00 – 2.45 μm

Liquid Scanner Benefits

Time and Cost Savings

- Location-independent and fast measurements
- Savings on shipping and external lab costs

Handling

- No alteration or destruction of the samples
- Exact and convenient placement of the samples

Product Conformity

- Protection of recipes (Composition not read out)
- Recognition of fakes or substandard products

Knowledge Development

Development of a globally accessible reference database due to the Spectral Engines Scanner Platform for on-spot testing

The scanner offers a wide range of possible applications, for example

- Pharmaceuticals composition analysis (Pharma Security)
- Illicit narcotics detection
- Quality checks for Gasoline, Lubrication Oil, Coolants
- Perfume, High quality oil identification (Product Conformity)
- Dairy and Cooking oil analysis

The Liquid Scanner comes ready to use in a convenient carrying case that includes

- Liquid Scanner
- Reference cuvette
- Glass cuvettes (for first tests)
- 3 x Distance adapters (for 1, 2 or 5mm)
- USB-C cable
- Microfiber cloth
- Quick guide

It makes sense.

Spectral Engines® GmbH
Weisskirchener Str. 2-6, 61449 Steinbach, Germany
sales@spectralengines.com
+49 6171 286 9760

WWW.SPECTRALENGINES.COM

 SPECTRAL ENGINES