

Portable NIR analyzer for use in the field, in the production process or in the laboratory.

The only portable NIR analyzer with handheld and benchtop functionality, delivering lab-quality performance.



Main features:

→ Autonomous device with true portability

Integrated computer, software, and touch screen in a single unit.

→ Dual functionality

Use as a handheld or benchtop analyzer, adapting to various analytical needs.

→ Advanced spectroscopy

- Spectral range: 900–1700 nm.
- Resolution: 5 nm with 256 pixels, surpassing the resolution of other NIR analyzers by two or more times.

→ Large measurement area

10 mm sampling area with 50 mm illumination for precise and uniform analysis.

→ User management

Three user roles: Analyst, Supervisor, and User Manager.

→ Rapid sample identification

Includes as optional barcode scanner to streamline identification and traceability.

→ Sampling versatility

Accessories for analyzing solids, liquids, and powders.

→ Advanced software

Features the Visum Master™ Model Builder for developing libraries for identification, classification, and quantitative methods in an automated manner, without requiring specialized expertise.

Applications:



Textile



Food



Animal Food



Plastic



Circular Economy



Lumber



Raw Material

Sectors

FOOD

- Control of quality parameters in minced meat, bakery and confectionery products, biscuits, oils, flours, baby food, snacks and other food products.
- Analysis of pH, Brix degrees, alcohol content, ART, and other parameters in beverages.
- Olive cooking degree determination, determination of polyphenols, acidity, fat content, yield, and dry matter.
- NBVT determination in Seafood.
- Rapid verification of raw material.
- Dairy product analysis

AGROINDUSTRY

- Analysis of quality parameters in grains, cereals, oilseeds, legumes, and fruits.
- Water activity.
- Analysis of fat, protein, lactose, and others in milk.
- CP, ADF, NDF, nutritional value, and other forage parameters.
- Determination of protein, fiber, ash, amino acids, and moisture in flours.

OTHER INDUSTRIES

- Identification of polymers, library included.
- Ethanol, glucose, lignin, cellulose and hemicellulose content.
- Control of talc and adulteration.
- Textile identification, library incorporated.
- Reaction analysis.



Visum Palm™ Accessories



Benchtop Sampler for Solids and Powders



Mini Sampler



Surface Flattener



Benchtop Liquid Sampling Holder



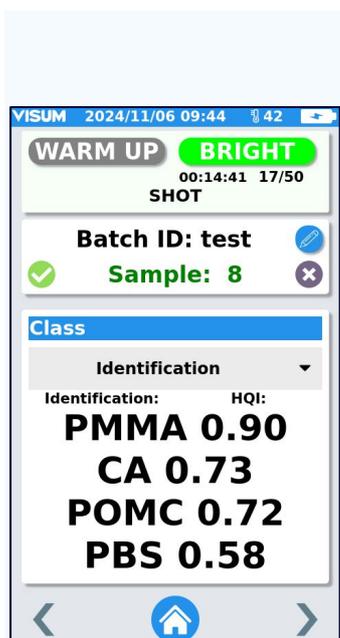
Benchtop Support

Visum Palm™ embedded software

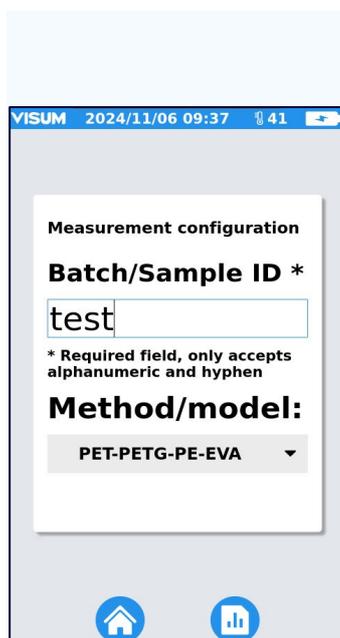
- **Product measurement:** Main mode for performing measurements or analyses. Enables viewing results and spectra, as well as acquiring and selecting spectra as a basis for developing predictive models.
- **Batch ID / Application:** Allows the user to record the batch or sample to be analyzed before starting measurements. It also enables selecting the appropriate calibration, method, or library for the analysis.
- **Historical data:** Previews analysis results. Complete and customizable reports are generated through the Visum Master™ PC software.
- **Performance diagnosis:** Automatic system performance check.
- **User account:** Enables managing user permissions, switching users, shutting down, or logging out. Roles: Analyst, Supervisor and User Manager.



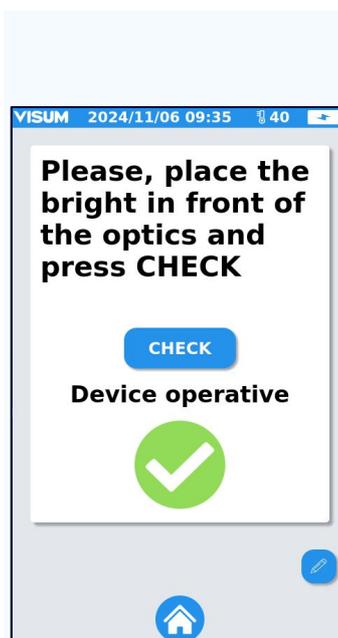
Main Visum Palm™ Screens



Product measurement



Batch ID / Application



Performance Diagnosis



User Account

Visum Palm™ Specifications

SENSOR	Linear array of InGaAs photodetectors
SPECTRAL RANGE	900 – 1700 nm
MEASUREMENT AREA	10 mm
LIGHTING AREA OF THE SAMPLE	50 mm
LAMP	Halogen, includes coupling system
TIME OF ONE MEASUREMENT	3 seconds
TYPICAL ACQUISITION TIME FOR A SINGLE SPECTRUM	5 ms
SPECTRAL RESOLUTION (↓ nm = ↑ spectral resolution)	5 nm (256 px)
SIGNAL-TO-NOISE RATIO (SNR)	4500:1
WAVELENGTH PRECISION	< 1 nm
ACQUISITION GEOMETRY	Diffuse reflectance. Transflectance with optional accessory on request
WEIGHT	1,9 kg
IP PROTECTION	IP54 - IP66 (optical aperture)
POWER SUPPLY	Rechargeable and replaceable battery. Charger (220 VAC) integrated into the device
BATTERY LIFE	Up to 4 hours. A spare battery with external charger can be supplied on request
LIGHT SOURCE LIFETIME	Up to 2 years standard use or 4000 h
INTEGRATED COMPUTER	A7 Dual-Core ARM®
BASIC CONNECTIVITY	Ethernet (TCP/IP) / Wi-Fi
USER INTERFACE	Integrated 5.3" resistive touch screen and manual trigger for spectrum acquisition
EMBEDDED SOFTWARE	Visum®
SOFTWARE AND AUTOMATED MODEL BUILDER FOR PC	Visum Master™ - Windows 10 or higher operating system. Recommended requirements: Intel i5, 16 GB RAM, 120 GB storage, 1366x768 resolution.
BARCODE SCANNER	Yes. Scanner supplied separately