

Chlorophyll measurement with multi-fluorescence filter changer.



Meat vs. fat content in salmon fillet.



Chlorophyll accumulation mapping in potatoes



Sprout detection in potatoes.



The VideometerLab500 is a complete system inclusive of a soft drawer and, optionally, of a smart beamer for color projection on products for easy and accurate manual sorting.

## SPECTRAL IMAGING MADE EASY

## VideometerLab 500

The VideometerLab 500 is a VideometerLab instrument with a larger field-of-view than the standard of 500x250 mm and a pixel size of 114 µm. It can be used for bigger samples such as batches of potatoes strips, chips, beets, apples or any products with a wide surface area to be measured. The system comprises of a soft close drawer, that easily feeds the device with samples. Furthermore, it optionally includes a smart beamer, projecting indication lights onto the products to rapidly measure which should be approved and which do not meet quality standards.

## VideometerLab 500 KEY FEATURES AND ADVANTAGES

- Homogeneous and diffuse illumination.
- Spectral imaging and quantitative analysis in 5-10 seconds.
- 17-20 different wavelengths/illuminants.
- Multispectral fluorescence option.
- 12.3 Mpixels per wavelength providing 200-360 million pixels/values per image.
- Standardized instrument including easy-to-use instrument calibration.
- Superior color determination compared to traditional RGB technology.
- Automatic change of dynamic range,

depending on the application.

- Long lifetime of the light sources. Up to 100.000 hours.
- Increased stability due to LED source technology.
- Powerful exploratory software for R&D.
- Recipe building tool for easy-to-use routine applications.



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## VideometerLab 500 TECHNICAL SPECIFICATIONS

Light sources	17 high power LED sources with a range from 405 nm to 970 nm.
Image size	2000 * 4000 pixels
Resolution	~113.8 µm / pixel
Dynamic range	Optimized according to the application using autolight setup.
Calibration	Absolute reflectance calibration using 2 reflectance calibration targets and one geometric calibration target. Simple calibration wizard procedure that takes 3 minutes.
Sample size	Sample size up to 500x250x120mm
Time of complete analysis	5-10 seconds per sample.
Dimensions closed Dimensions opened	900 mm(h) * 620 mm(w) * 930 mm(d) 900 mm(h) * 620 mm(w) * 1200 mm(d).
Weight	55 kg
Power supply	110-240 VAC, 50/60 Hz.
Ambient temperature	Operation: 5-40 °C, Storage: –5-50 °C.
Ambient humidity	20-90 % RH non-condensing.
PC requirements	Minimum configuration: Intel i7 12th generation or better, 32 GB RAM, USB3 SuperSpeed port.
Software requirements	Microsoft Windows 10/11 Professional 64 bit, full Windows update.
Hardware options	Smart beamer for light projection. Filter changer (for combined reflectance/fluorescence).
Software options	MSI Toolbox Blob Toolbox Classifier Design Tool (CDT)

Videometer offers a wide range of multi spectral imaging instruments measuring what you see with your eyes – and beyond. They are fast, non-destructive, versatile, and reproduceable with world-leading accuracy. The accompanying Videometer software provides a unique variety of machine learning and AI spectral imaging analysis tools. Laboratory, at-line, on-line, and in-line systems are designed for quality assurance, process control, PAT, and product development.



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Detection of impurities in salmon with MSI tools (top left and right) and beamer projection (bottom).





The VideometerLab500 comes with a soft close drawer and, optionally, a smart beamer which projects colors on products for easy and accurate manual sorting or classification.