

Data sheet

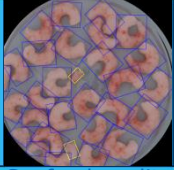
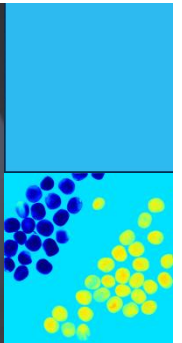
Moisture in biscuits



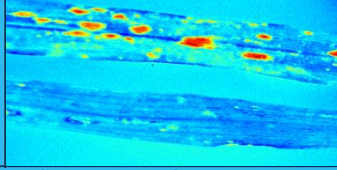
VideometerLab 4 – a complete and unique spectral imaging system



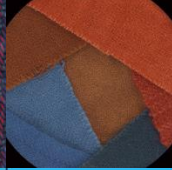
Maturity of peas



Seafood quality



Pathogens on plants



Textile analysis

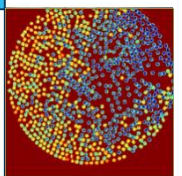
VideometerLab 4

VideometerLab 4 is a spectral imaging instrument designed for fast and accurate determination of color, texture, and chemical composition on surfaces up to 90 x 90 mm per image. The instrument is an easy-to-use system integrating illumination, camera, and computer technology with advanced digital image analysis and statistics. The technology is particularly useful for quantitative measurements of chemical and visual properties of samples or surfaces.

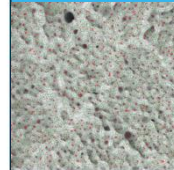
Using strobed LED technology VideometerLab 4 combines measurements at up to 20 different wavelengths into a single high-resolution spectral image. Every pixel in the image is a reflectance spectrum and the instrument may include UV, visual, and NIR wavelengths.

Key features and advantages of VideometerLab 4

- Integrating sphere providing homogeneous and diffuse illumination
- Spectral imaging and quantitative analysis in 5-10 seconds
- 19-20 different wavelengths/illuminants
- Multispectral fluorescence option
- Autofeeder option for granular products
- 6 or 9.1 Mpixels per wavelength providing 120-360 million pixels/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
- Combined frontlight and backlight using optional backlights
- Automatic movement of illumination in relation to the sample
- Powerful exploratory software for R&D
- Recipe building tool for easy-to-use routine applications



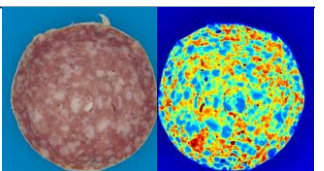
Coating analysis of granular products

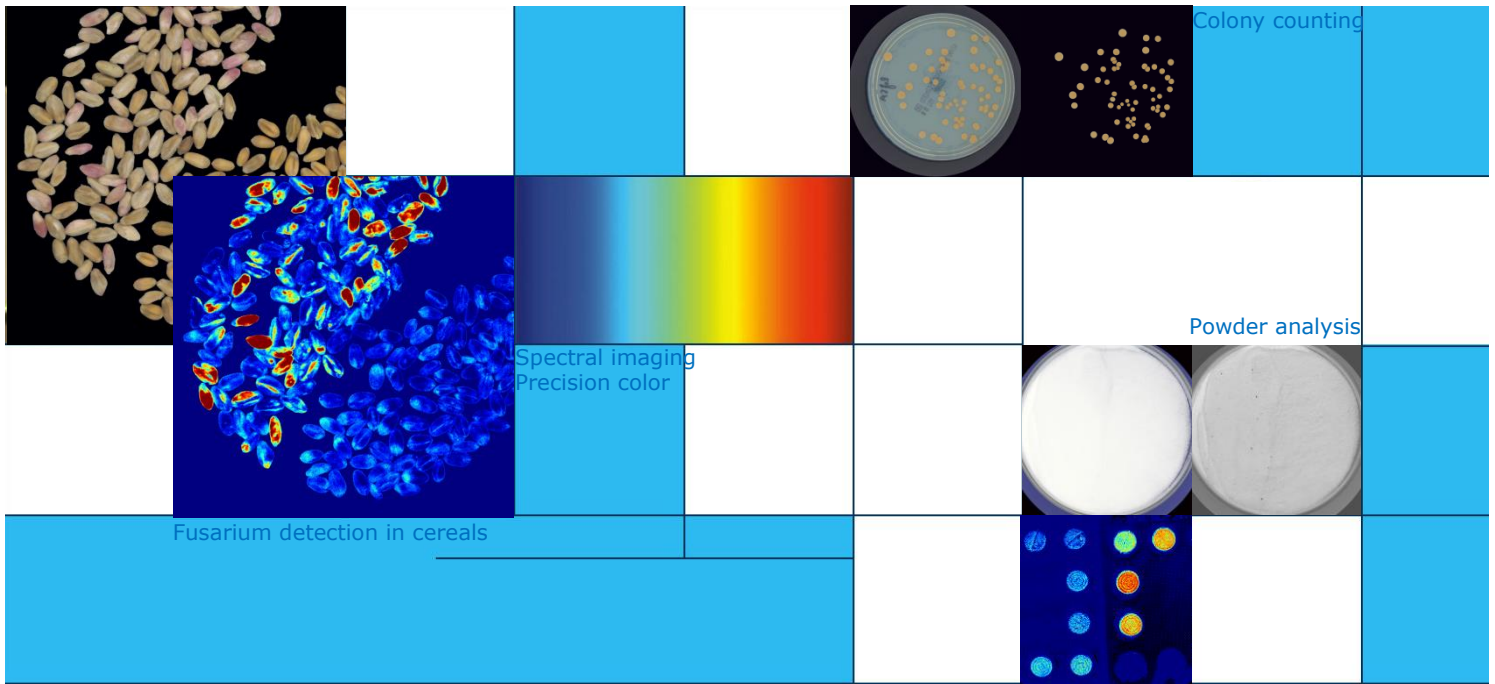


Pore structure analysis



Salami fermentation





Technical specifications

Light sources	19 high power LED sources with a range from 365 nm to 970 nm. One optional external light source.
Image size	2192 x 2192 pixels (optional 2704x2704)
Resolution	~41 µm / pixel (optional ~33 µm)
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	Free height max. 90 mm, diameter of inspection opening 110 mm
Time of complete analysis	5-10 seconds per sample
Dimensions instrument	490-585 mm(h) x 420 mm(w) x 590 mm(d)
Dimensions flight case	570 mm(h) x 500 mm(w) x 710 mm(d)
Weight	14.1 kg (Net), 26.6 kg (Gross)
Power supply	100 – 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 or better, 16 GB RAM, USB2 port, USB3 SuperSpeed port
Software	Microsoft Windows 7/8.1/10 Professional 64 bit, full windows update
Hardware options	Darkfield/brightfield backlight Filter changer (for fluorescence) Autofeeder (for granular products)
Software options	Image processing toolbox (IPT) Spectral imaging toolbox (MSI) Blobs toolbox

Videometer



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