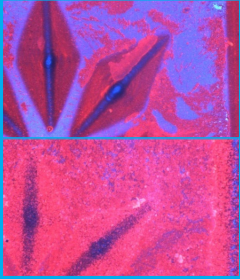
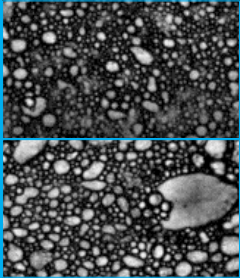


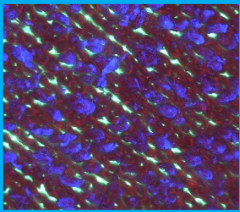
Latent fingerprint detection.



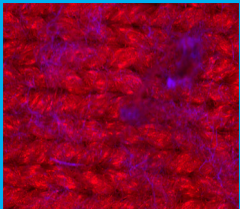
Chocolate blooming.



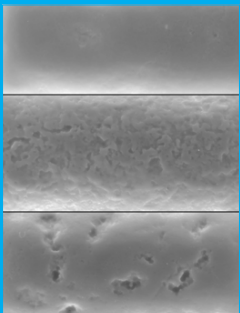
Coffee foam bubble size distribution.



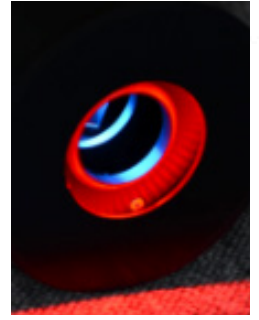
Fuzz and pills on textile fabrics.



Fuzz on a knitted sweater.



Tablets and dent map.



μ -topography imaging
Videometer MultiRay is superior for objective measurements of μ -topography and gloss.

Videometer MultiRay

Videometer MultiRay is a hand held imaging instrument designed for fast and accurate determination of μ -topography, graininess, gloss and porosity of material surfaces. The measurements are instantaneous and non-destructive. 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 gloss- and texture-related properties, and may also be combined with measurements related to size and shape distributions. Using LED technology **Videometer MultiRay** combines measurements of gloss and texture in a high resolution image. Every pixel in the image relates to the local gloss/topography and the surface properties are summarized using statistical texture analysis.

Videometer MultiRay KEY FEATURES AND ADVANTAGES

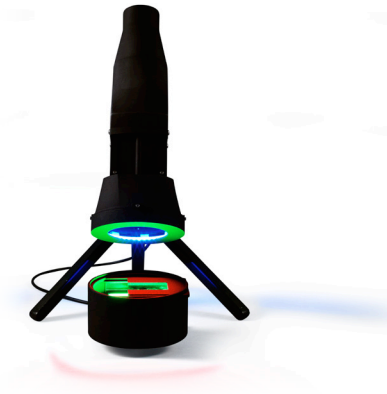
- Hand held instrument combining multiple illumination geometries.
- Captures surface finish characteristics gloss/graininess.
- Instantaneous measurement of 19.5 mm × 14.5 mm with 10 μ m pixels.
- Powerful exploratory software and recipe building tool for routine applications.



Videometer A/S · Hørkær 12 B, 3 · DK-2730 Herlev · Denmark
Tel +45 4576 1077 · mail@videometer.com · www.videometer.com

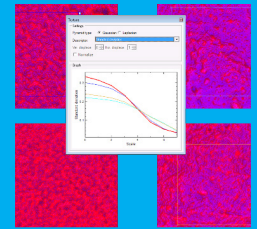
Videometer MultiRay

TECHNICAL SPECIFICATIONS

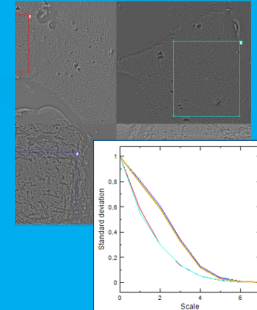


Light sources	Combination of darkfield illumination and coaxial illumination.
Image size	4000 × 3000 pixels.
Resolution	Pixel size is 10 µm × 10 µm.
Field-of-view	Standard field-of-view is 19.5 mm × 14.5 mm. Can be extended.
Calibration	Calibration procedure using customer selected calibration target or sandpaper grit size 80. Simple calibration wizard procedure that takes 30 seconds.
Time of analysis	1 second per sample.
Dimensions	250 mm(h) × 100 mm(w) × 110 mm(d).
Weight	0.52-0.66 kg (net) (including backlight option), 0.92-1.04 kg (including power supply).
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 i3 or better, 6 GB RAM, USB2 or USB3 port.
Software requirements	Microsoft Windows 10 Professional 64 bit, full Windows update.
Hardware options	Backlight: Green collimated, 100 mm(∅) × 50 mm (h). Sample focusing support. Articulating arm.
Software options	Texture training and example package.

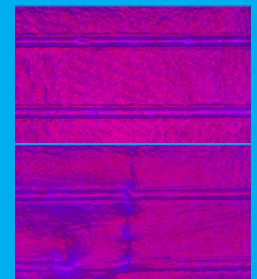
Videometer offers a wide range of multi spectral imaging instruments measuring what you see with your eyes – and beyond. They are fast, non-destructive, versatile, and reproducible with world-leading accuracy. The accompanying Videometer software provides a unique variety of machine learning and AI spectral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



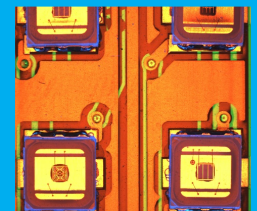
Hazelnut spread fat crystallization patent



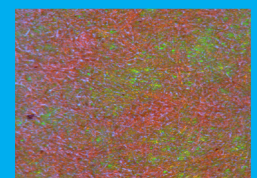
Mayonnaise gloss and graininess.



Sealing inspection. Good (top) and broken (bottom) seal.



Quality control in electronics production.



Paper surface topography.

Other example applications

- Graininess in emulsions like yoghurt and mayonnaise.
- Gloss/shine of fruit and vegetable surfaces.
- Surface texture of anodized materials.

