ProCareLight
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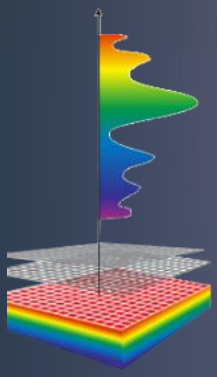
MUSES9-HS

The next generation hyperspectral imaging technology

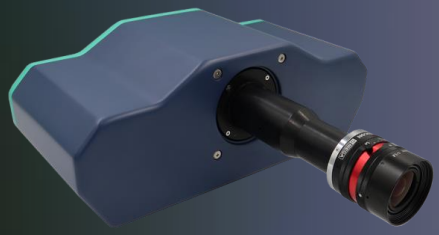
Technology

The heart of MUSES9-HS hyperspectral imager is an electro-optic tunable filter module, which automatically selects and tunes the imaging central wavelength. The tunable filter is synchronized with the imaging sensor module, so that several narrow-band images are captured during a spectral scanning.
In the image domain, the data set includes a full image at each individual wavelength. In the spectroscopy domain, a fully resolved spectrum at each individual pixel is recorded. Bulky mechanical scanners are no longer required, to the benefit of portability, set up simplicity, versatility and direct adaptability to all kinds of lenses, microscopes and telescopes



Competitive Advantages

- Spectral scanning technology, requiring no mechanical scanning to acquire the hypercube
- Video-rate spectral imaging at any desired wavelength
- No post-processing is required to obtain spectral images
- Superb light sensitivity (94% light throughput), no longer restricted by slit
- 4K level spatial resolution
- Distortion and saturation effects-free spectral imaging
- Embedded autofocusing electro-optics eliminate spectral image defocusing due to chromatic aberrations
- Automatic, dynamic range-preserving calibration
- C-mount popular thread, offering freedom in lens selection
- Fully automated, turnkey operation
- Advanced software platform for camera control, calibration, pixel level spectroscopy and spectral classification mapping



SPECTRICON Reinventing hyperspectral Imaging

MUSES9-HS

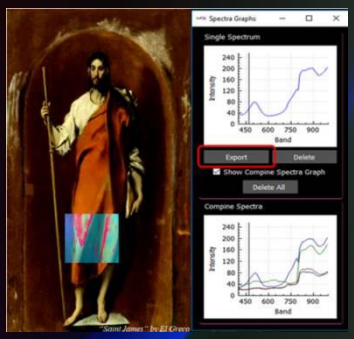
The tunable filter hyperspectral imaging superiority

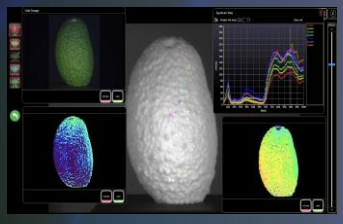
Specifications

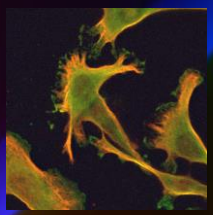
- Spectral range: 370-1000nm
- Light throughput of spectral filtering: 94% (polarization independent)
- Spectral bands: 126 (extendable to 315)
- Tunning step: 5-15 nm, adjustable (configurable to 2nm)
- Full spectral cube scanning time: ~30s (exposure limited)
- Spectral image inspection: Video rate spectral imaging at any selected wavelength
- Supported imaging modes: transmission, fluorescence and reflection modes
- Spatial resolution/band: 6.4 million pixels (3096HX2080V). Binning options provided
- Number of spectra per spectral cube: 6.4 million spectra
- Mechanical scanning: not required
- Camera thread: c-mount freedom in lens selection, adaptable to all microscopes
- Dynamic range: 12 bit
- Camera interface: USB3.0
- Calibration: automatic in all imaging modes
- Software: camera control, pixel level spectroscopy, spectral classification mapping
- Weight: 2,1 kg
- Accessories: integrated light sources, λambda^{3+} software suite for spectral cube analysis

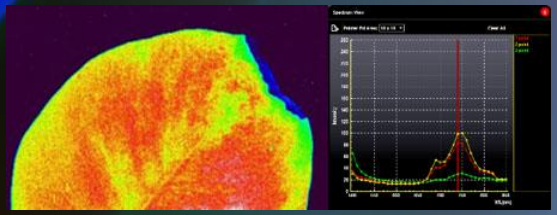
Applications

- Nondestructive analysis
- Remote sensing
- Drone imaging
- Minerology
- Plant pathology
- Microscopy
- Artwork nondestructive testing
- Archaeology
- Food shorting
- Forensics
- Biomedicine









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