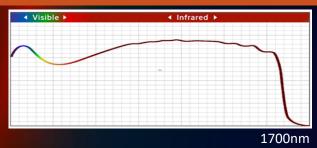
# MUSES9 HS3-7, the ultrabroadband 370-1700nm Spectral Imager

# **Technology**

MUSES9 HS3-7 spectral camera addresses the demand for combining spectral information from UV-VIS-NIR-SWIR with a single camera, for advancing the analytical capabilities of spectral imaging in demanding applications.



The MUSES9 HS3-7 is based on the Sony's IMX992 imaging sensor, coupled with Spectricon's propriety, full frame tunable filter technology. The filter's tuning range matches the entire sensitivity range of the sensor, delivering up to 250 narrow spectral bands. The camera comes with standard and configurable versions.

# **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 (90% throughput), no longer restricted by slit
- 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- or F-mount thread
- o Fully automated, turnkey operation
- Advanced software platform for camera control, calibration, pixel level spectroscopy and spectral classification mapping





# **MUSES9 HS3-7,** broadening spectral range, expanding addressable applications

## Specifications\*

- Spectral range: 370-1700nm
- Filter's light throughput: 90% (polarization independent)
- Sensor's Quantum Efficiency>75%
- Pixel size: 3.45X3.45μm
- O Spectral bands/resolution: up to 250 and configurable/5-15 nm tunning step (selectable)
- Full spectral cube scanning time: ~40s (exposure limited)
- Spectral image inspection: Video rate spectral imaging at any selected wavelength
- Supported imaging modes: transmission, fluorescence and reflection modes
- Spatial resolution/band: 5.32 or 3.45 MP
- Camera Mechanical scanning: not required
- Camera thread: C- or F-mount
- Dynamic range: 12 bit
- Camera interface: USB3.0
- Calibration: automatic in all imaging modes
- Software: camera control, pixel level spectroscopy, spectral classification mapping
- Weight: 2.16 kg
- O Accessories: integrated light sources, λambda<sup>3+</sup> software suite for spectral cube analysis

# **Applications**

- Remote sensing
- Agriculture and forestry
- Minerology
- Artwork analysis and archaeology
- Forensics
- Biomedical
- Food, plastic and mineral sorting
- Solar panel inspection
- Water content imaging
- Inspection metal coating
- Chemical Imaging
- Pharmaceuticals
- Thermal imaging (over 300°)







<sup>\*</sup> Figures are subject to change without notice