

Hyperspec® Starter Kit offers simple, fast, and easy application set-up for hyperspectral scanning and analysis of sample materials

Headwall's Hyperspec Starter Kit™ offers users in industrial, life sciences, and medical application areas a flexible system designed to maximize the benefits of a customer's investment in hyperspectral imaging technology. With an adaptable selection of proven technology components and customized software, hyperspectral users have the ability to significantly reduce the time necessary to get their spectral imaging projects up and running.

The Hyperspec® Starter Kit consists of the following components:

- Image acquisition & display with Hyperspec® software
- High precision linear stage and controller for sample scanning
- Stable illumination with high intensity light line & source optimized for the spectral range
- Height adjustable, robust sensor gantry mount with base plate

The Hyperspec® Starter Kit instantly allows users to determine spectral properties of their material samples. Hyperspec™ software provides the convenience to scan your sample areas, spatially and spectrally bin, create specific spectral band regions of interest, stitch together sequential scan frames to create hyperspectral data cubes, color render, and export image data to an industry standard software application package. Ease of use and increased productivity are key benefits of Headwall's Hyperspec Starter Kit™.

With many years of successful hyperspectral deployment experience, Headwall engineers have selected proven, reliable hardware components which maximize the performance of the Hyperspec® VIS, Hyperspec® VNIR, Hyperspec® Extended VNIR, Hyperspec® NIR, Hyperspec® SWIR, and Micro-Hyperspec™ imaging sensors.

With the Hyperspec® Starter Kit, users can adjust and customize a range of operating parameters: the spatially resolved area of the sample, the angle of illumination at the sample, the illumination intensity at the sample, the speed at which the sample is scanned, as well as customize for spectral and spatial image binning.



Applications:

- Chemical analysis of material composition
- Food safety & inspection
- Machine vision
- Medical & health sciences
- Pharmaceutical manufacturing
- Process monitoring & control
- Semiconductor & photovoltaic
- Textiles
- Waste recycling & sorting

Key Benefits:

- Instantly collect hyperspectral data
- Determine spectral band differentiators
- Increased user productivity
- Cost effective deployment
- Display & render hyperspectral images
- Ease of set-up, ease of use
- Flexibility to quickly modify configurations
- Quickly run multiple experiments
- Rapid development of spectral libraries
- Reduced time to obtain hyperspectral results

Application-Specific Solutions For Critical Environments

The Hyperspec® Starter Kit is available in two models:

VIS/VNIR/NIR	380 nm to 1700 nm
NIR/SWIR	900 nm to 2500 nm

- Adjustable Hyperspec™ mounting stage & gantry
 - Base plate, tower, and sensor mounting hardware
- Precision DC Servo linear stage & controller
 - 100mm travel distance (optional 250mm travel)
- Lighting
 - Adjustable light line and light guide
 - 50mm wide standard (optional 200mm wide)
 - DC regulated 150W QTH light source
- Hyperspec® software for management of hyperspectral data
 - Combines calibration, sensor, and linear stage control



Optimized for every application, Hyperspec® imaging spectrometers offer industry leading spectral imaging performance.

Headwall Photonics is the leading designer and manufacturer of imaging spectrometers.

Hyperspectral Sensors	Spectral Range
Hyperspec® VIS	380 - 825 nm
Hyperspec® VNIR	400 - 1000 nm
Hyperspec® Extended VNIR	600 - 1600 nm
Hyperspec® NIR	900 - 1700 nm
Hyperspec® SWIR	1000 - 2500 nm
High Efficiency Hyperspec® NIR	900 - 1700 nm
High Efficiency Hyperspec® SWIR	1000 - 2500 nm

Information on UV, MWIR, and LWIR Hyperspec® sensors are available upon request.

Raman Imaging Instruments

- Raman Explorer™ 266 nm
- Raman Explorer™ 532 nm
- Raman Explorer™ 642 nm
- Raman Explorer™ 785nm
- Raman Explorer™ 830 nm
- Raman Explorer™ 1064 nm



Visit www.HeadwallPhotonics.com for more information on end-user and OEM spectral imaging solutions.

About Headwall Photonics:

Headwall Photonics is the leading designer and manufacturer of imaging spectrometers and spectral instrumentation for industrial, commercial, and government markets. Headwall's high performance spectrometers, spectral engines, and holographic diffraction gratings have been selected by OEM and end-user customers around the world for use in critical application environments. As a pioneer in the development of innovative spectrographs and imaging spectrometers based on optical technologies, Headwall enjoys a market leadership position through the design and manufacture of patented spectral instrumentation that is customized for application-specific performance. Headwall Photonics was formed in 2003 as the result of a management buy-out from Agilent Technologies. For more information please call 978.353.4100 or email us at Information@HeadwallPhotonics.com.



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