

SOC710VP[®] HS-Portable

Portable Vis/NIR Spectral Imaging System

With the SOC710VP[®] Portable Spectral Imaging System, you can take spectral images anywhere! Whether you are in a greenhouse, on the production floor, or in a lab, the compact SOC710VP[®] delivers real-time, research-grade results with a wavelength range of 400 – 1000 nanometer.

The ideal spectral imaging system for applications in precision agriculture, forestry, mining and oceanography, the SOC710VP[®] offers high performance, portability and durability at an affordable price. No compromises here. A 12-bit camera and precision factory calibration yield data with excellent dynamic range that is free from errors.

At 8"square, the 710VP is compact. The SOC710VP[®] system is ergonomically designed for portability and ease of use.

A single USB 2.0 connection is all that is required between the camera and your laptop, desktop or touchpad enabled ultra-portable computer. The software has been designed for single point touch-and-use operation.

A rich set of analysis functions has also been included that support colorimetry, spectroradiometry and remote sensing.



HIGH QUALITY DATA

Using a sophisticated, grating-based imaging spectrometer, the SOC710VP[®] insures high quality data across the 400 to 1000 nanometer spectral range with a minimum amount of distortion.

VERSATILE

Because of the SOC710VP[®] 's internal scanning design, you can change lenses as easily as you would on your SLR camera. The system can also be mounted to any microscope for biological scanning.

PORTABLE

At only 3kgs, the system can be tripod mounted for hands free operation. Its USB interface means no PCI slots or capture cards are required

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SOC710VP

APPLICATION DEVELOPMENT

With 20 years of experience and patents in various areas of real-time Spectral imaging, SOC can answer questions and assist in the development of turnkey solutions for you and your client.

SOFTWARE SUPPORT

Software updates, FAQ, tutorials and system calibration files can all be downloaded from SOC's on-line support site.

HARDWARE SUPPORT

Surface Optics is serious about supporting our customers and standing behind our products. A one-year warranty comes with the system and an optional service plan is also available.

For more information on any of our products or services please visit us on the Web at:

www.surfaceoptics.com

System Requirements

Windows XP

USB 2.0 Port

1 Gigabyte of Memory

Intel Atom™ class processor

Specifications

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|----------------------|--|
| Spectral Coverage: | 400-1000 nanometers |
| Spectral Resolution: | 4.6875 nanometer |
| Bands: | 128 |
| Dynamic Range: | 12-bit |
| Pixels per line: | 696 |
| Speed: | 30 spatial lines per second 23.2 seconds/cube (696 by 520 cube) |
| Focal Length: | Configurable (based on lens used) |
| Lens Type: | C-Mount |
| Weight: | 2.95 Kg (6.5 lbs) |
| Dimensions (HWL): | 9.5 x 16.8 x 22cm (3.75 x 6.62 x 8.66 in.) |
| Power: | 12-VDC / 100-240VAC (50-60Hz) |

The system includes SOC's HSAAnalysis software for calibration and data analysis. Data is recorded in open format binary data which can be read in third-party hyperspectral analysis packages such as RSI's ENVI®.

Applications

Machine Vision

- web and surface inspection
- agricultural inspection
- chemical analysis

Agricultural

- Precision Farming
- Classification
- Water Stress
- Crop health

Scientific

- Microscopy
- Biological analysis

Military

- Target Discrimination
- Identify Friend or Foe

Remote Sensing

- Ground truth
- Material Mapping