

SPECIMINSIGHT

SpecimINSIGHT is a desktop software that allows users to browse and explore hyperspectral data, create and validate classification or regression models. The models created with SpecimINSIGHT can be deployed on SpecimCUBE computing platform for real-time data processing.

TURN HSI DATA QUICKLY INTO APPLICATIONS

- Explore and analyse hyperspectral data
- Train qualitative and quantitative prediction models
- Apply the models on SpecimCUBE for real-time data processing

TECHNICAL DETAILS

Supported O/S	Windows 11 64-bit Windows 10 64-bit
---------------	--

Minimum PC requirements	Intel i3 or equivalent 4GB of RAM Intel HD series GPU At least 256GB hard drive
-------------------------	--

Recommended PC requirements	Intel i5 or equivalent 16GB of RAM for CPU based calculation CUDA v10 compatible GPU for GPU based calculation (optional) SSD or NVMe for faster HSI data loading
-----------------------------	--

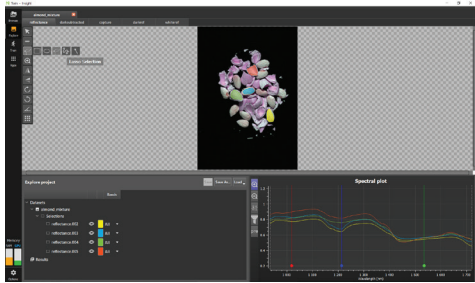
Supported data format	ENVI
-----------------------	------

Features

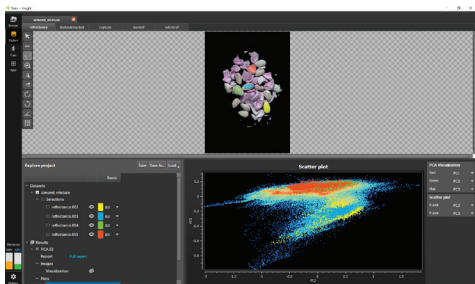
- Various plotting tools - such as spectral, spatial, time-series or scatter plots
- Extensive toolkit for selecting different areas in HSI data - such as single point, rectangle, brush, lasso, magic wand and statistics based selection
 - Ability to modify, combine or scale selections freely
- Support for spectral libraries
- Qualitative analysis with PLS-DA
- Quantitative analysis with PLS
- HSI analysis tools:
 - Principal Component Analysis (PCA)
 - Spectral similarity tool
 - Spectral library matching with Maximum likelihood and Spectral Angle Mapper (SAM)
 - HyperSpectral Calculator and spectral indices
 - Tools for color measurement
 - Wide variety of preprocessing options - such as Savitzky-Golay smoothing, Standard Normal Variate (SNV), Mean-centering or Normalization
 - Ability to save preprocessed HSI data
- Comprehensive tools for visualizing HSI data in many ways - such as heatmaps or various rescaling options for RGB visualizations
- Cropping and mosaicing tools for reducing redundant HSI data
- Extensive labeling and annotation support for datasets and results
- Html based reporting and visualization tools for distributing HSI analysis results
- Real-time data processing with SpecimCUBE



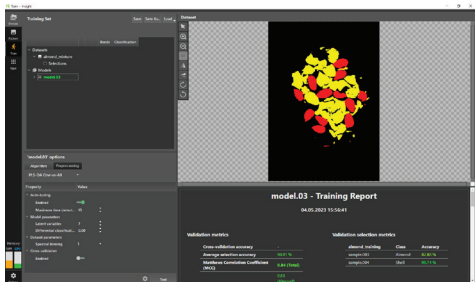
SPECIMINSIGHT



**BROWSE AND VIEW
HYPERSPPECTRAL DATA**



**EXPLORE AND ANALYZE
HYPERSPPECTRAL DATA**



**CREATE CLASSIFICATION AND
REGRESSION MODELS USING
TRAINING AND VALIDATION DATA**



**APPLY THE MODELS IN REAL-TIME
PROCESSING APPLICATIONS**

- Transfer applications developed with SpecimINSIGHT to SpecimCUBE for real-time data processing, enabling sorting, quality inspection, process optimization, and analysis of various parameters.
- Suitable for industrial and research applications in diverse environments.
- Sorting, quality inspection, and process optimization.
- Analysis, quantification, and monitoring of nutrients, moisture, protein, sugar, fat, pH values, etc.

Specim, Spectral Imaging Ltd. ▪ A Konica Minolta Company ▪ POB 110, FI-90591 Oulu Finland ▪ Elektriikkatie 13, Oulu Finland
Tel +358 (0) 10 4244 400 ▪ VAT Identification number FI10079234 ▪ info@specim.com ▪ www.specim.com

Information in this document is subject to change without notice. Specim, Spectral Imaging Ltd. reserves the right to change or improve its products and specifications and to make changes in content without obligation to notify any person or organization of such changes or improvements.