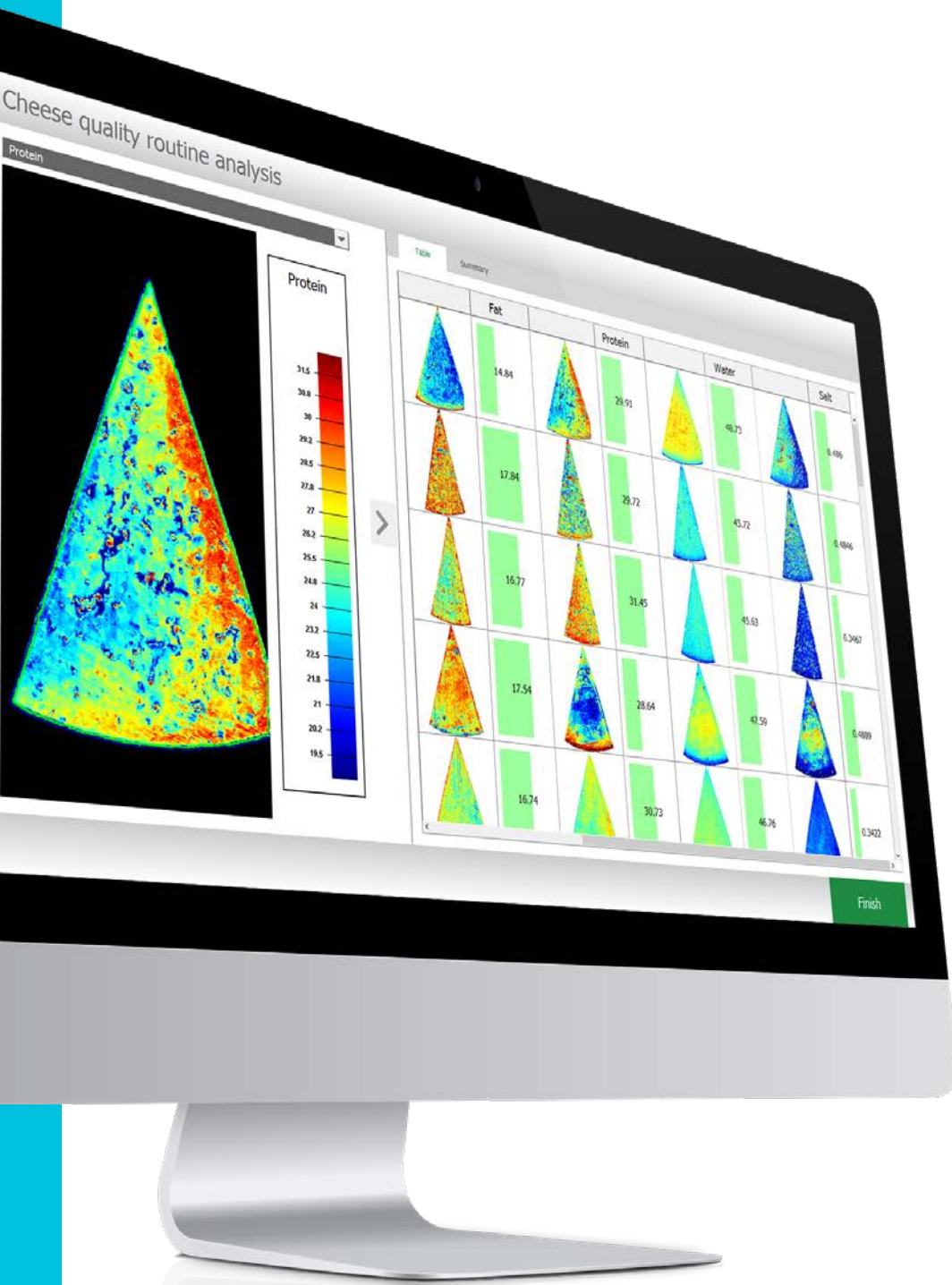# breeze.

HYPERSPECTRAL IMAGING MADE EASY
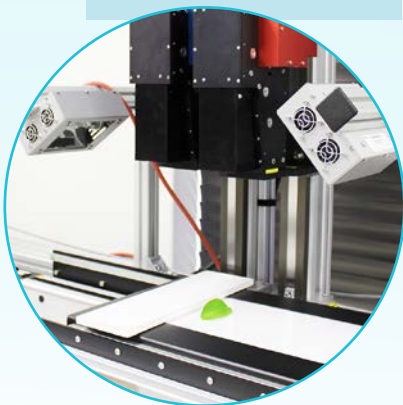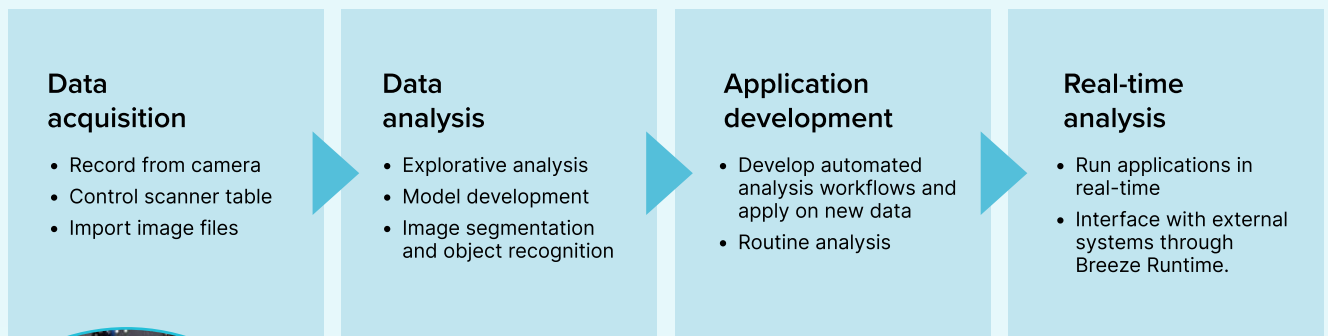YOUR SOFTWARE SOLUTION

Prediktera.

breeze.
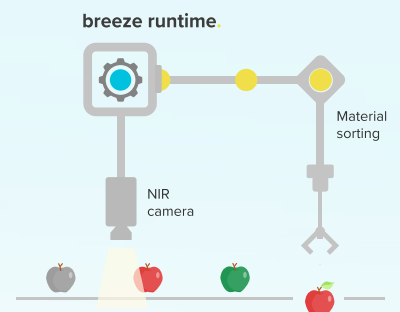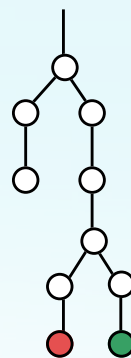
Hyperspectral imaging software

Breeze is Prediktera's premiere software solution enabling a wide range of hyperspectral imaging applications. It is used in research, application development, routine analysis and easily extends into real-time industrial analysis solutions.

- Speed up research and development of applications
- User friendly interface for experts and beginners
- For R&D and for real-time in industry

Your software, from idea to solution!

Data acquisition
- Record from camera
- Control scanner table
- Import image files

Data analysis
- Explorative analysis
- Model development
- Image segmentation and object recognition

Application development
- Develop automated analysis workflows and apply on new data
- Routine analysis

Real-time analysis
- Run applications in real-time
- Interface with external systems through Breeze Runtime.

Neural networks

Chemometrics

Machine learning

Band math

Object recognition

breeze runtime.

Material sorting

NIR camera

Modelling and data analysis.

Classification and Quantification
Machine learning
- Auto fit
- Neural network
- Decision tree
- Support vector machine
- Random forest
- Logistic regression
- Maximum entropy
- Poisson regression
- Linear Regression

Chemometrics
- PLS
- PLS-DA, Hierachical PLS-DA
- PCA, SIMCA

Spectral library analysis
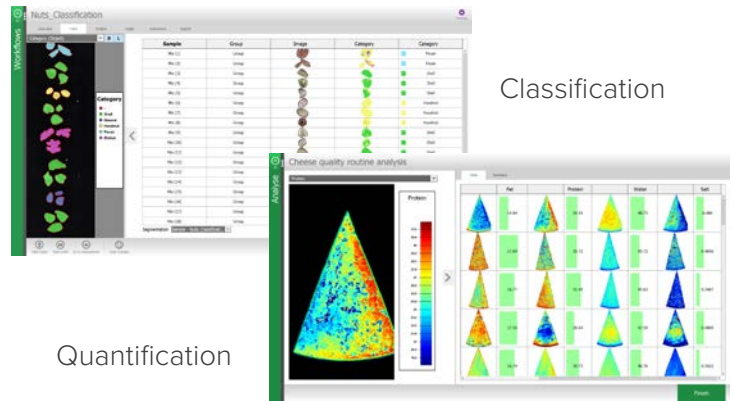- Constrained Spectral unmixing
- Spectral angel mapper

Band math
- Vegetation Index

Neural network ONNX models
- From external software (ex Pytorch)

Python Interface

Classification

Quantification

Object identification and image segmentation.

Spectral analys
- Classification model (ML, chemometrics)
- Band math

Shape based analysis
- Deep learningYOLO v4 and v5, Faster R-CNN, ONNX neural networks (ex. Pythorch)

Other segmentation
- Pixel binning, grid, and pixel coordinates
- Manual selection of ROI

Supported cameras.

Sample movers.

HySpex	Cameras using HySpex Library SDK Baldur, Classic VNIR / SWIR, Mjolnir	Lab Rack, Field Scanner (Tripod and rotation stage)
Specim	Cameras using LUMO SDK SWIR, FX-10, FX-17, FX-50 and more	SisuChema, Lab-scanner, ViaSpec II
inno-spec	RedEye 1.7	Stepper table
Resonon	Pika L/XC2/UV, Pika IR (NIR320)/IR+/IR-L/IR-L+	
Unispectral	Monarch II	
Basler	Cameras using Basler Pylon SDK	

System requirements.

- 64bit OS. Runs on Windows® (minimum 8.1, recommended 10 or later), Linux (Ubuntu 18 or later) and MacOS (11 or later).
- Java Runtime Environment 64 bit, version 20 or later required. Bundled with installation for Windows and Linux versions. Separate installation required for Mac.
- RAM: 8 GB RAM (32+ GB recommended)
- CPU: Minimum 4 core processor, recommended 8 core or more (intel, i7 or better). ARM CPU version available. GPU not required.
- HDD: Software installation requires 1 GB. Recommended HDD size 1 TB or more (total disk space required depends on data file size).

A trusted partner in hyperspectral imaging.

Prediktera gives you user-friendly software solutions. With over 15 years of experience in data and imaging analysis we aim to be your preferred provider of software solutions for hyperspectral imaging.

We can assist you all the way from early inquiries and hyperspectral application development to custom integration projects.

We help you succeed

"Our software solutions make it easy to get started and productive in hyperspectral imaging. Don't hesitate to contact us to discuss the possibilites in your industry."
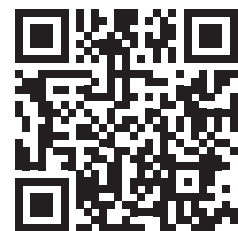
— Andreas Vidman, CEO

- Feasibility studies
- Training
- Application support
- Software support

Contact us.

Download a free 30 day trial

Book a demonstration

info@prediktera.se

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