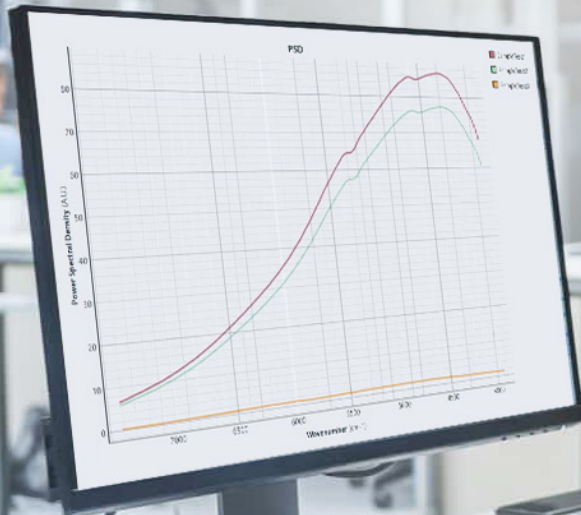




Explore, Evaluate, and Innovate in Spectroscopy Research

Join the global shift toward miniaturized spectroscopy with our simple plug-and-play kits that give researchers hands-on access to breakthrough NIR and MIR sensors.

Our Technology Enabled Hundreds of Research Studies Globally, including



Spectroscopy Is Changing and Researchers Are Driving What Comes Next



Spectroscopy Is Evolving Beyond the Lab

NIR & MIR spectral sensors are getting smaller, more accurate, and more connected, transforming spectroscopy from a static, lab-bound tool into something dynamic and ubiquitous. This shift is unlocking new research possibilities across materials, food, agriculture, chemistry, and more.



Researchers Are Leading the Change but Facing Limits

Around the world, researchers are pushing spectroscopy into new domains and creating fresh use models. Yet, working with emerging sensing technologies can still be complex, from hardware integration to software access, slowing down the pace of experimentation.



Si-Ware Makes Progress Easier to Achieve

With plug-and-play kits built around its breakthrough miniaturized NIR and MIR sensors, Si-Ware gives researchers a direct way to explore performance, test ideas, and advance how spectroscopy is applied while staying in budget.

The Most Comprehensive NIR & MIR Portfolio for Research

Si-Ware's portfolio of plug-and-play kits gives researchers access to the broadest range of miniaturized NIR and MIR sensing technologies available today.

Each kit is built for exploration, helping universities and research teams to evaluate sensor performance, test ideas, and explore new spectroscopy use cases across the 1.3 to 10 μm spectral range.

Si-NIR Mini DVK



 **Spectral range**
1,350 – 2,550 nm

Contains the world's smallest FT-NIR. Ideal for sensing homogeneous samples.

Si-NIR Matrix DVK



 **Spectral range**
1,350 – 2,550 nm

Features a compact sensor with a large sampling area. Ideal for analysis of granular and non-homogeneous samples.

Si-MIR Core



 **Spectral range**
1.3 – 4.7 μm

Includes the world's smallest FT-IR module. Ideal for application where size and integration potential are key.

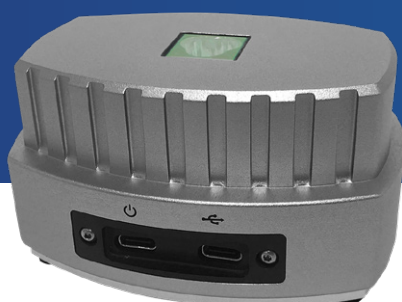
Si-MIR WideRange



 **Spectral range**
2 – 10 μm

Application-agnostic platform covering the molecular fingerprint region. Ideal for advanced material identification.

Si-NIR Research Kits



Si-NIR
Mini DVK



Si-NIR
Matrix DVK

Core technology	MEMS FT-NIR	MEMS FT-NIR
Photodetector	Extended InGaAs	Extended InGaAs
Spectral range	1,350 – 2,550 nm	1,350 – 2,550 nm
Typical SNR	2,000:1	2,000:1
Dimensions	100 × 80 × 45 mm ³	75 × 65 × 81 mm ³
Weight	550 g	300 g
Sampling method	Diffuse reflectance. Transflectance can be enabled with external accessory.	Diffuse reflectance. Transflectance can be enabled with external accessory.
Material types	Homogenous solids and liquids	All types of solids and liquids
Optical interface	Built-in light source and light collector for small sample coverage (3 mm diameter)	Built-in light source and light collector for large sample coverage (10 mm diameter)
Electrical interfaces	USB-C	USB-C or Ethernet
SDK Available	Yes	Yes
Optional Accessories	Liquid and powder kits	Liquid and powder kits

Si-MIR Research Kits



Si-MIR
Core



Si-MIR
WideRange

Core technology	MEMS FT-IR	MEMS FT-IR
Photodetector	PbSe	Cooled InAsSb
Spectral range	1.3 – 4.7 μm ($\approx 7,000 - 2,130 \text{ cm}^{-1}$)	2 – 10 μm ($\approx 5,000 - 1,000 \text{ cm}^{-1}$)
Typical SNR	1,700:1	5,000:1
Dimensions	Light Source: 40.8 × 30 × 24 mm ³ Spectrometer module: 85 × 60 × 47 mm ³	Light Source: 116 × 115 × 118 mm ³ Spectrometer module: 109 × 116 × 78 mm ³
Weight	600 g	1.4 kg
Sampling method	Transmission	Transmission
Material types	Thin solids, liquids, and gases	Thin solids, liquids, and gases
Optical interface	Separate light source and spectral sensing modules with adjustable distances up to 35 cm	Separate light source and spectral sensing modules with adjustable distances up to 20 cm
Electrical interfaces	USB-C	USB-C and mini-USB
SDK Available	Yes	No
Optional Accessories	Liquid and gas kits	Liquid and gas kits

Si-Spect

4 kits, one software to measure, visualize, and explore easily.

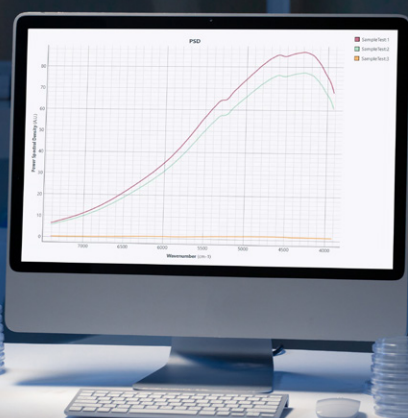
Si-Spect is the user-friendly software environment that powers Si-Ware's spectral sensing kits.

Designed for exploration, it gives researchers everything they need to collect, visualize, and manage spectral data in minutes.

No coding, no complex configuration, and no barriers to experimentation. From first measurement to model development, Si-Spect connects the sensor to the researcher's workflow, enabling fast, hands-on discovery.



Simplified Control, Instant Spectra



Plug-and-play device recognition



Adjustable measurement parameters (scan time, averaging, reference)



Instant spectral visualization and quality indicators



Data logging and automatic file organization

From Data to Model Development

Si-Spect makes it easy to turn raw spectra into usable datasets for analysis and model building.

Collected spectra can be exported in universal formats compatible with MATLAB®, Python, Unscrambler®, and other chemometric environments.

Researchers can tag samples, compare batches, and manage calibration sets ensuring smooth transition from experiment to model.



How Si-Ware Systems' Spectral Sensing Kits Can Advance Your Research



Access Advanced Tech Within Academic Budgets

Get access to advanced NIR & MIR sensing solutions without the cost and complexity of full analyzers.



One Kit, Many Research Projects

Use the same kit across different studies and materials (solids, powders, liquids, gases). Swap samples, not systems and run diverse projects without changing platforms.



Tune, Test, and Compare Setups

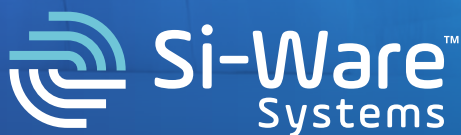
Adjust sensor settings and measurement parameters to study their effect on performance: resolution, averaging, scan time, references, sampling geometry, optics, and accessories. Designed for flexible configurations and methodological exploration.



Explore Use Cases Beyond the Lab

Take spectroscopy into new contexts fields, teaching labs, and pop-up experiments, to see how new spectroscopy applications can be enabled outside controlled environments.





Pioneer spectroscopy research with Si-Ware's kits

**Contact us to learn more about special offers for
academic and research institutions**



BR-007-1125-EN-V1.0