

The i-LAB[®] Visible Hand Held Analyzing Spectrometer

The i-LAB Hand Held Analyzing Spectrometer

is a versatile and powerful instrument that allows users to record and compare spectral measurements in their work environment. The i-LAB utilizes

MicrOptix Technologies' patented,

integrated sensing system. This technology has miniaturized the core optical system used by spectrometers which enables i-LAB users to bring the instrument to the sample. The i-LAB system features a powerful PC software program named i-LAB Spectrum that allows users to create and transfer customized measurement methods to the i-LAB. For ease of conducting measurements, the i-LAB features several sample measurement adaptor options.



S560 Visible Model



Key Features

- **Portability**
Weighs 7.4 ounces! Allows users to take the instrument to the sample source. Requires little storage space.
- **i-LAB Spectrum PC Software**
Enables users to build custom i-LAB measurements. i-LAB measurement results can be downloaded to a PC for further analysis.
- **Measurement Flexibility**
Allows for concentration, absorbance, and sample comparison measurements of liquids and solid surfaces.

The patented i-LAB Hand Held Analyzing Spectrometer was developed to give users the flexibility to test liquids and solids when and where they want.

i-LAB Measurement Adaptors



Markets and Applications



Remote Field

- Water Quality Testing
- Agricultural Monitoring
- Fuel Dye Measurements



Process Plant

- Quality Assurance & Control
- Sample Testing at Source



Laboratory

- Rapid Data Collection & Analysis
- Custom Research Methods



Classroom

- College Chemistry Labs & Research
- Environmental Science & Research

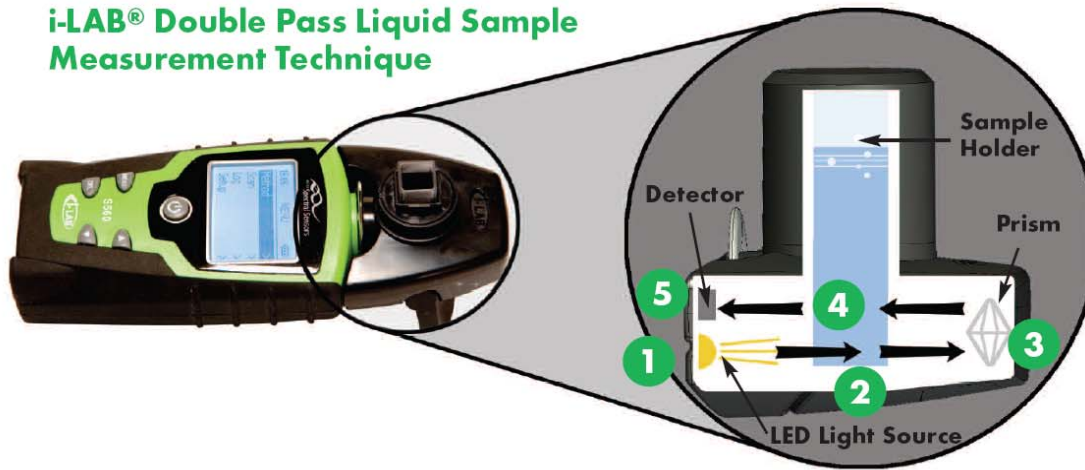
“Bringing the Instrument to the Sample Source!”



Microptix Technologies, LLC
284 Main Street, Suite 400 • Wilton, ME 04294-3044
T. 207.645.3600 • www.microptix.com

The i-LAB[®] Visible Hand Held Analyzing Spectrometer

i-LAB[®] Double Pass Liquid Sample Measurement Technique



1. The i-LAB's LEDs generate a spectrally balanced light source.
2. Light passes through the sample.
3. Light is redirected from adaptor prism.
4. Light passes through the sample a second time.
5. Light is measured by the Detector.

i-LAB [®]	Features	Benefits
Wavelength Range	400 nm to 700nm	Generate complete spectroscopic data <ul style="list-style-type: none"> • Absorption, Transmission, L*, a*, b*, Delta E • Beer's Law, peak ratios, peak area, etc. • Multiple wavelength readings and calculations
Bandwidth	4 nm - 7 nm	High average of data transfer
Spectral Resolution	1.4 nm	High accuracy over the entire Wavelength Range
Light Source	Spectrally Balanced LEDs	Long life, LED rating >10K hours; measurement within approx. 15 sec
Display	Backlit LCD, 1.75" x 1.25" (4.5 cm x 3.2 cm)	Reliable, Energy efficient, and easy to read
Detector	Linerized Photo Diode Array	Compact optical system with NO moving parts
Dimensions	5" x 2.5" x 1.5" (13 cm x 6.4 cm x 3.8 cm)	Light weight and Ergonomic.
Weight	7.4 ounces - 200 grams	Portable, can carry anywhere in the field
Power	1 Watt with 3 AA Batteries	Energy efficient
Data Logging and Method Storage	Up 1000 Spectra + Libraries	Data Auto Tracking by number, time, and date
Approvals	CE Marketing	Meets EU consumer satisfaction, health, and environmental requirements
Data Logger Software	USB transfer of data to computer	Easy to use, spread sheets and graphs

Manufacturing Specifications and Features Subject to Change

Product Selection

Part Number

VSA-100 Samplette Adapter, USB Cable, Samplette Software, and Datalogger Software



VCU-200 Cuvette Adapter, USB Cable, Cuvette Vials, Cuvette Adapter Software, Liquid Calibrator Standards, and Datalogger Software



VRV-300 Round Vial Adapter, USB Cable, Round Vial Adapter Software, Liquid Calibrator Standards, and Datalogger Software



Part Number

VSR-400 Surface Reader Adaptor, USB Cable, Surface Reader Software, Surface Reader Calibrator, and Datalogger Software



VACP-500 Academic Package with 6 Preloaded Chemistry Experiments, USB Cable, Cuvette Adapter, Cuvette Vials, Cuvette Adapter Software, Liquid Calibrator Standards, and Datalogger Software



NEW i-LAB[®] LITE Meter that measures light wave intensities and distributions from 400-700 nm. Applications include plant physiology, green houses, environmental sciences, commercial lighting and LEDs, and the photography and film areas. i-LAB Lite Meter, USB Cable, Lite Meter Software, and Datalogger Software

