The i-LAB® TA Academic Package

The i-LAB TA Hand Held Spectrometer is a versatile and powerful instrument that allows educators and students to capture and analyze spectral measurements in their classroom, lab, and field environments. The i-LAB utilizes MicrOptix Technologies' patented, integrated sensing system. This technology has miniaturized the core optical system used by spectrometers thus enabling 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 extract data from up to 500 samples measured with the i-LAB. Educator specific experiments and measurement methods can be readily created and transferred with the Spectrum Software to the i-LAB. The system also has a "Live Scan" feature that enables users to capture data from a sample and import it directly into the i-LAB Spectrum Software. For ease of conducting measurements, the i-LAB includes a 10mm Cuvette Adaptor and reusable/disposable Samplettes.

S560 Visible Model

Key Features

- **Scans & Captures Full Visible Spectrum**
  Enables simple and elaborate lab experiments and novel research.
- **Portable Hand Held Instrument**
  Weighs 7.4 Ounces and Operates on 3 'AA' Batteries. Requires little lab space to store and use.
- **Innovative Research & Teaching Tool**
  Flexible scanning and measurement capability.
- **Cost Effective Spectrometer**
  Allows more instruments to be utilized at lab workstations.
- **Measurement Flexibility**
  Allows for concentration, absorbance, and sample comparison measurements.
- **LED Light Source**
  Requires less power than traditional Spectrometers while not requiring periodic field calibrations.

The patented* i-LAB TA Academic Package was developed to provide Educators with an innovative Teaching Tool that enhances student learning.

*U.S. Patent No. 7,459,713 (2008)

i-LAB Measurement Adaptors

Classroom

- General Chemistry
- Quantitative Analysis
- Instrumental Analysis
- Inorganic Chemistry

Laboratory

- Laboratory Research
- BioChemistry
- Analytical Chemistry
- Colorimetric Reactions

Field

- Field Research
- Environmental Science
- Physical Chemistry
- Agricultural Research

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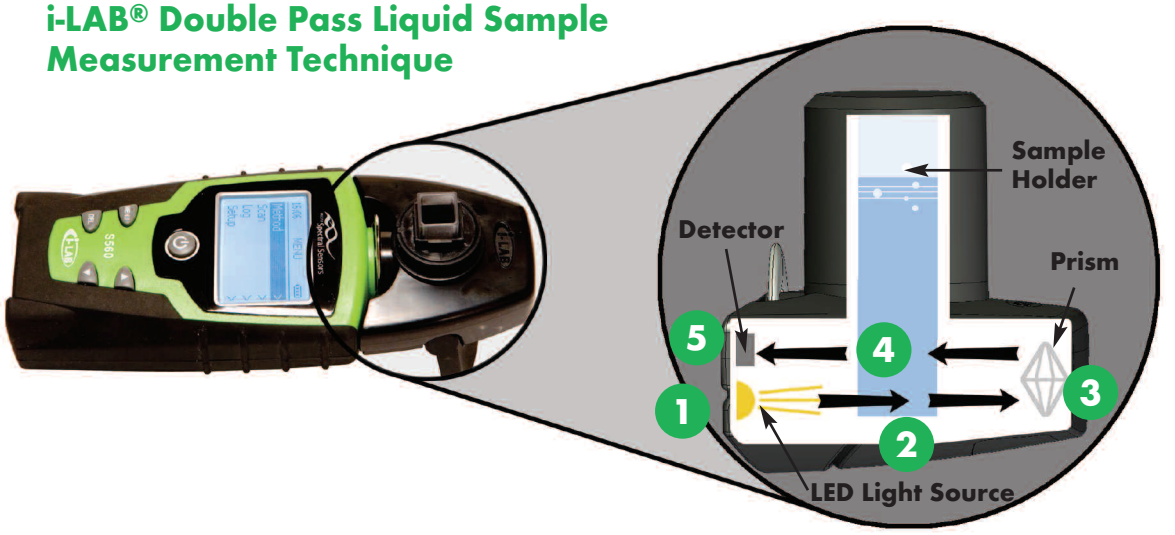
"Bringing the Instrument to the Sample Source!"

i-LAB *"Bringing the Instrument to the Sample Source!"*

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.

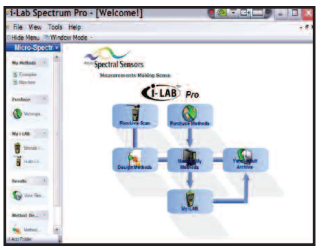
Technology Overview

The i-LAB features our patented, integrated sensing system comprised of a high efficiency, linearized photo diode array detector and high stability, high output, low power LED light sources.

Academic Experiments included with the i-LAB TA

- Introduction to Spectroscopy
- Le Chatelier's Principle
- Determination of an Equilibrium Constant
- Beer's Law Experiment
- Reduction of Methylene Blue by Ascorbic Acid
- Quantitative Analysis of Aspirin

i-LAB Spectrum Software enables users to create custom measurement methods for their i-LAB.



i-LAB Spectrum Software

i-LAB® Specifications & Features

Wavelength Range	400 - 700 nm • Visible Model 650 - 1050nm • NIR Model
Bandwidth	4 - 7 nm • Visible Model 6.5 - 10.5 nm • NIR Model
Light Source	Spectrally Balanced LEDs
Display	Backlit LCD, 2" x 2"
Detector	Linearized Photo Diode Array
Communications	mini-USB
Dimensions	2.75"(w) x 5"(h) x 1.75"(d)
Weight	7.4 Ounces
Power	Approx. 1 Watt using 3 AA Batteries
Data Logging	Up to 500 Spectra
Method Storage	Up to 100 Measurements
Approvals	CE
i-LAB TA Price	$1595 - V997 Instructor Model* $1295 - V996 Student Model**

*__V997 Instructor/Researcher Model__ includes i-LAB Visible Range Hand Held Analyzing Spectrometer, Cuvette (10 mm) Sample Adaptor, 53 Reusable/Disposable Samplette's, Spectrum Software, 6 preloaded Chemistry experiments, Teacher and Student Experiment documentation, and 3 additional i-LAB analysis methods.

**__V996 Student Model__ includes i-LAB Visible Range Hand Held Analyzing Spectrometer, Cuvette (10 mm) Sample Adaptor, 3 Reusable/ Disposable Samplette's, and 6 preloaded Chemistry experiments.