# GlobiLab MultiPlatform Software
for iOS and Android

Today, there is no better platform for multimedia-rich visualization of abstract science concepts than iOS and Android. The multi-platform GlobiLab data analysis software was specifically designed to enhance iPad and Android education features and qualities in the science learning environment. The contemporary look and feel, colorful data display in a variety of meter types, together with advanced markers and annotation functionality, allowing text and images to be added at key points along the graph all enable students to tell the experiment story behind their data results.

What's more, multi-touch pinch and pan gestures deliver an even more immediate learning experience. For example, students can further appreciate GPS functionality using just a finger and thumb to map, zoom, pan or change scale.

GlobiLab tablet software includes the following features:
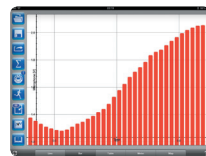
*Variety of data displays:* Meters, table, bar graph, line graph and Google Maps
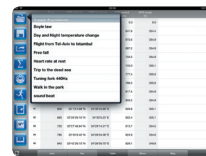
File management: Open and save samples to the tablet. Access saved data from the desktop computer.

Labdisc management: Setup of all data logging parameters, online display of current measurements, download of the Labdisc sample memory

Graph manipulations: Markers, zoom, crop, text and image annotation
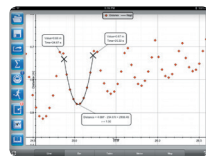
Data analysis: Including statistics and curve fitting

Workbook: Engaging experiment workbooks investigating key science concepts

Labdisc Mobile science cart
Storing and charging a complete class set of 16 Labdiscs and 16 tablets

The Labdisc wireless science lab has made teaching more convenient, organized and accessible than ever before. Globisens has expanded this concept, introducing the Mobile Science Cart – a complete laboratory on wheels!

At an attractive price-point, the Mobile Science Cart has mobilized a secured 21st century science lab to students anywhere in the school. Finally, messy and expensive science labs with heavy equipment are a thing of the past.

Labdisc
It's time for something new

Specifications

Science parameter	Labdisc enviro ENVIRONMENT	Labdisc gensci GENERAL SCIENCE	Labdisc physio PHYSICS	Labdisc biochem BIOLOGY & CHEMISTRY
Supported platforms	Standalone, PC, MAC, iOS, Android, Linux, Chrome OS	Standalone, PC, MAC, iOS, Android, Linux, Chrome OS	Standalone, PC, MAC, iOS, Android, Linux, Chrome OS	Standalone, PC, MAC, iOS, Android, Linux, Chrome OS
Built-in sensors	Barometer, Sound Level, Colorimeter, Dissolved Oxygen (electrode sold separately), GPS, IR Temperature, Amb. Temperature, Ext. Temperature, pH, UV, Relative Humidity, Turbidity, Universal Input	Air Pressure, Sound Level, Current, GPS, Microphone, Light, Motion, Relative Humidity, pH, Voltage, Amb Temperature, Ext. Temperature, Universal Input	Accelerometer, Air Pressure, Amb. Temperature, Current, Ext. Temperature, Light, Low Voltage, Microphone, Motion, Universal Input, Voltage	Air Pressure, Amb. Temperature, Barometric Pressure, Colorimeter, Conductivity, Dissolved Oxygen (electrode sold separately), Ext. Temperature, GPS, Heart Rate, Light, pH, Relative Humidity, Thermocouple, Turbidity, Universal Input
GPS data logging	Yes	Yes	No	Yes
Remote data logging	Yes	Yes	Yes	Yes
Max. sampling speed	100,000/s	100,000/s	100,000/s	100,000/s
Sampling resolution	12-bit	12-bit	12-bit	12-bit
Int. measurement storage	1,000,000 samples	1,00,000 samples	1,000,000 samples	1,000,000 samples
Int. rechargeable battery	LiPO 3.6 V	LiPO 3.6 V	LiPO 3.6 V	LiPO 3.6 V
Battery life	> 150 hours	> 150 hours	> 150 hours	> 150 hours
Display	Graphical LCD, 64 × 128 pixels	Graphical LCD, 64 × 128 pixels	Graphical LCD, 64 × 128 pixels	Graphical LCD, 64 × 128 pixels
Keypad	Yes	Yes	Yes	Yes
USB communication	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Wireless communication	Bluetooth V2.0	Bluetooth V2.0	Bluetooth V2.0	Bluetooth V2.0
Automatic sensor testing	Yes	Yes	Yes	Yes
Auto sensor calibration	Yes	Yes	Yes	Yes
Size (round disc)	ø = 132, H = 45 mm	ø = 132, H = 45 mm	ø = 132, H = 45 mm	ø = 132, H = 45 mm
Weight	300 gr.	300 gr.	300 gr.	300 gr.
Temperature range	-10 to 50 °C	-10 to 50 °C	-10 to 50 °C	-10 to 50 °C
Standard compliance	CE, FCC	CE, FCC	CE, FCC	CE, FCC
External power supply	100-240 VAC / 6 VDC 1A	100-240 VAC / 6 VDC 1A	100-240 VAC / 6 VDC 1A	100-240 VAC / 6 VDC 1A
Software	GlobiLab	GlobiLab	GlobiLab	GlobiLab
Accessories	Table stand, carry bag (optional)	Table stand, carry bag (optional)	Table stand, carry bag (optional)	Table stand, carry bag (optional)

About Globisens

Founded on 15 years of global innovation, Globisens brings trusted industry knowledge and proven leadership in the development and production of science education tools. The launch of the Labdisc line has revolutionized the science and environmental education markets, with a 21st Century learning tool that integrates with the latest technologies and educational trends.

Globisens Ltd.
info@globisens.com

www.**GLOBISENS**.com

Labdisc
It's time for something new

Wireless, compact data logger for every science, with up to 15 built-in sensors.

Clear the clutter with a single device.

Inquiry-based learning was never so easy!

• All-in-one, complete lab in the palm of your hand
• Next generation wireless technology
• Autonomic for indoor and outdoor science
• Ever ready – zero setup time, with automatic sensor testing & calibration
• Over 150 hours of battery life
• Interactive multi-disciplinary experiment books for K-12
• Seamlessly integrating with latest technologies in the digital classroom

All-in-one, complete lab in the palm of your hand

The Labdisc places an advanced science lab into the hands of young Scientists. The Labdisc is the only K-12 science solution with up to 15 wireless sensors built into a single compact device - revolutionizing learning in terms of convenience, cost and portability.

Next generation wireless technology

More than just a cable-free, clean and safe working environment, a single wireless transmission from the Labdisc for all built-in sensors reduces radio interference. This also eliminates the need for costly transmitters built into every sensor.

Automatic sensor testing and calibration

The compact Labdisc carries key features such as display, keypad, memory and battery, enabling data collection, independent of a computer. This keeps science cost effective, and free from computing issues such as availability or even hard-to-read screens in direct sunlight on a field trip. Back in the class or Lab, the Labdisc can operate as a sensor interface, transmitting online measurements to the computer.

- DISPLAY
- KEYPAD
- MEMORY
- BATTERY

Sensors located on the perimeter of the disc

Rotating plastic ring to protect built-in sensors

Distance sensor located at the back of the disc

Ever ready - zero setup time, with automatic sensor testing and calibration

Even the simplest experiment in a typical class of 30 students requires at least 90 separate items to be tested, calibrated, setup and put away. With the Labdisc this number is reduced to 15. What's more, the Labdisc's internal microprocessor automatically calibrates and tests all the built-in sensors to a known reference, releasing educators to focus on science concepts rather than equipment.

Over 150 hours of battery life

The long battery life of the Labdisc makes it a practical tool for inside or outside the classroom. With over 150 hours of data logging, middle to high school biology or earth science students can explore hypothesis relating to slow changing phenomena such as plant growth, or the impact of climate change and pollution.

Interactive multi-disciplinary experiments for K-12

- Record sound waves and analyze sound beat and wave superposition using the Labdisc's **24K/sec sampling rate**.
- Perform the classic Free Fall experiment and apply sophisticated GlobiLab analysis **functions like quadratic regression** to understand gravity.
- Apply the **broad built-in sensor range** and **long battery life** to measure humidity, atmospheric pressure, noise, luminosity and temperature changes over 24 hours.
- Verify the classic Gas Law – PxV = constant to less than 1% error with the **highly accurate** air pressure sensor.
- Explore the effect of microclimates with full integration of the Labdisc sensors **with GPS functionality**.

Labdisc/tablet science bundle with GlobiMate:

Built for education. Selected for science.

GlobiMate provides an ideal solution for 21st century school science. This high resolution tablet offers built-in sensors and microscope with large touch-screen.

Together with the Labdisc, the Intel-designed GlobiMate is transformed into a powerful and portable digital laboratory with up to 18 built-in sensors.

Intel® designed

GlobiLab Software
for Middle & High Schools

GlobiLab software does it all!

Enabling students to measure their world, analyze real-time data samples and develop a skilled scientific response.

Middle and high school students benefit from GlobiLab's pioneering platform for experimentation, data analysis and lab reporting. What's more, wireless communication with the Labdisc hardware allows setup via the software and full control over the data logger and built-in sensors.
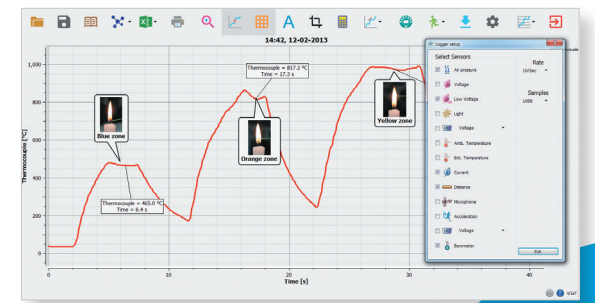
Advanced functions and graphical tools include crop, markers, zoom and graph annotation. In addition, sophisticated data analysis functions enable users to perform derivative and regression functions, as well as view comprehensive statistics.

Graphical displays clearly present real-time experiment data, helping students connect science concepts with the world around them.

Multiple vivid meter displays are updated five times every second and include:
- Analog gauge
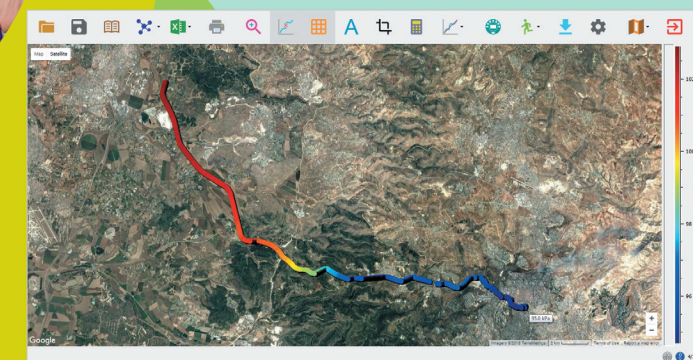- Digital bar
- Thermometer
- Digital value
- Color change
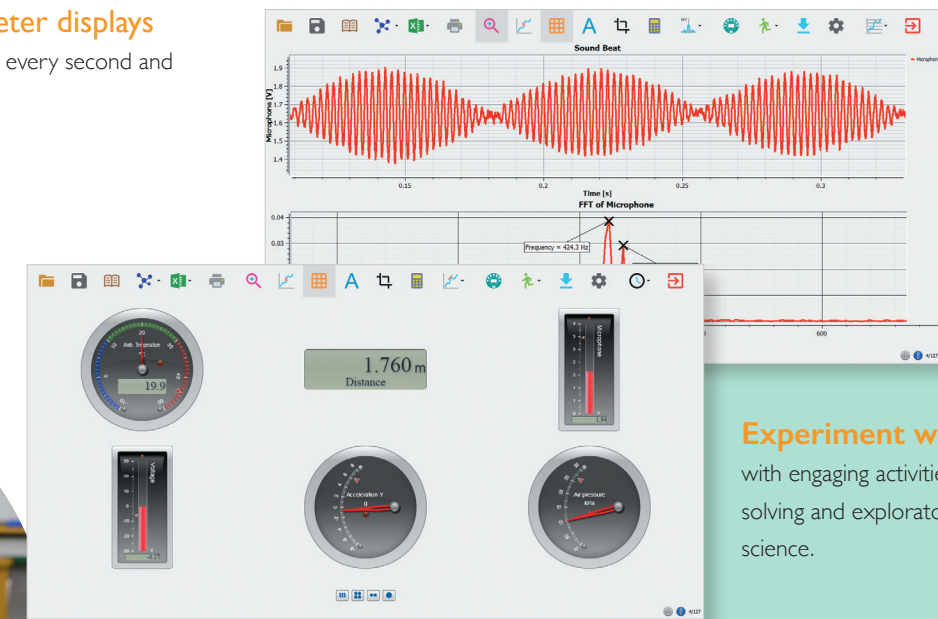
Experiment workbooks are packed with engaging activities that take a problem-solving and exploratory approach to learning science.

Google Maps with Global Positioning Systems (GPS) features merge latest sensor, Internet and satellite technologies. The GlobiLab software maps sensor values and plots them as a layer over a Google Map. Leveraging the full Google Maps functionality, such as zoom, panning and the ability to choose a map or a satellite image, this powerful tool, allows data display which indicates the actual location of where measurements took place. Students can map local pollution or weather conditions and compare their data with other schools - opening the door for meaningful collaboration between students all over the world.