Globisens

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**

Patent pending

worlddidac

AWARDS of EXCELLENCE winner! TECH4LEARNING

WINNER e-learning awards 2013

Intel® Education Alliance

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 batter, 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

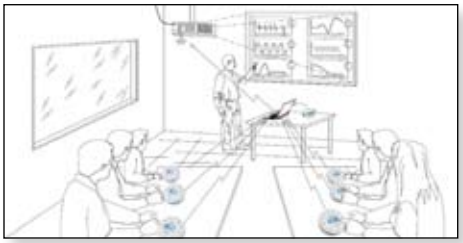
The long battery life of the Labdisc makes it a practical tool for inside or outside the classroom. With over 150 hours of data logging, middle to high school biology or earth science students can explore hypothesis relating to slow changing phenomena such as plant growth, or the impact of climate change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

Seamlessly integrating with latest technologies in the digital classroom

Connect 8 Labdiscs wirelessly to a single teacher's computer to communicate with the class interactive board. No need to buy more computers, the compact, cable-free Labdisc transforms the class into a digital science lab with 8 stations for hands-on experimentation and collaborative learning. The interactive board displays the students' experiments, data analysis for comparisons and collaboration. Available Q2/13.



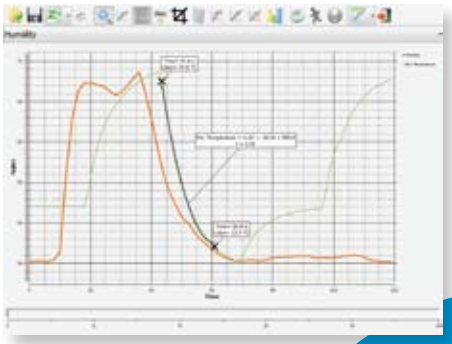
GlobiLab Software

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.

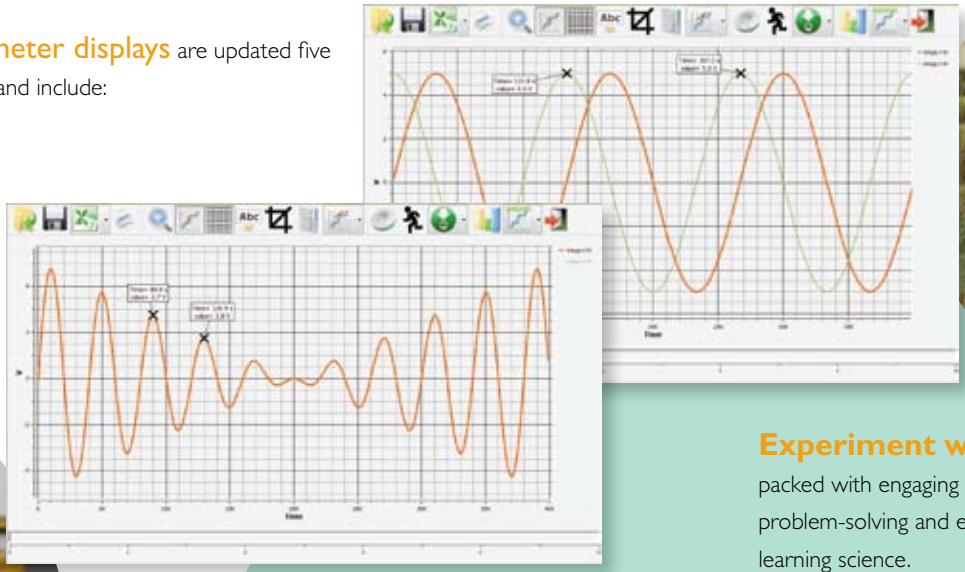


Advanced functions and graphical tools include crop, markers, zoom and graph annotation. In addition, sophisticated data analysis functions enable users to perform derivative and regression functions, as well as view comprehensive statistics.

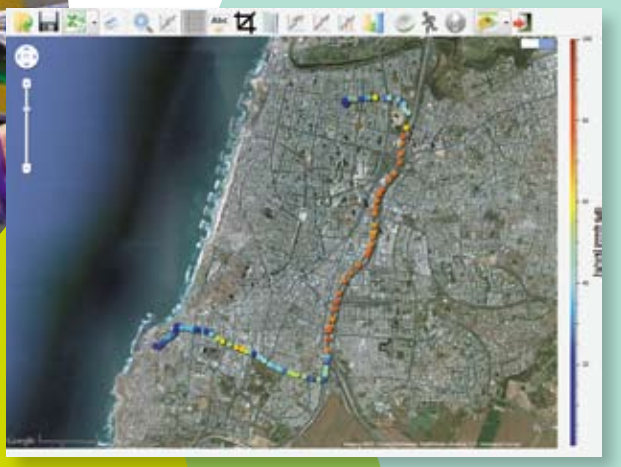
Graphical displays clearly present real-time experiment data, helping students connect science concepts with the world around them.

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.

GlobiLab Software

for iPad

Today, there is no better platform for multimedia-rich visualization of abstract science concepts than the iPad. What's more, teachers and students of all ages will do just about anything to get their hands on one!

Incorporating essential GlobiLab software functionality, this new version was specifically designed to enhance iPad education features and qualities in the science learning environment.

The look and feel of the software replicates the iPad aesthetic, applying the Meter GUI with colorful data display in a variety of meter types. Additional multimedia features include advanced markers and annotation functionality, allowing text and images to be added at key points along the graph and enabling students to tell the experiment story behind their data results.

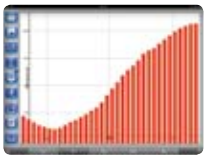
What's more, the iPad multi-touch pinch and pan gestures deliver an even more immediate learning experience. For example, students can further appreciate GPS functionality using just a finger and thumb to map, zoom, pan or change scale.

GlobiLab iPad software includes the following features:

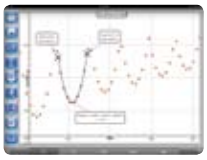
Variety of data displays: Meters, table, bar graph, line graph and Google Maps

File management: Open and save samples to the iPad. 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

GlobiWorld Software

for Elementary Schools

Elementary school students enter the captivating GlobiWorld, where seven scientific theme parks can be explored.

Every theme park offers a wealth of resources where students can operate state-of-the-art laboratories, analyze data in multiple displays and explore experiment workbooks. Together with biographies of world-renowned scientists and amazing science trivia, GlobiWorld offers an enriched learning experience young scientists will never forget.

GlobiWorld was created in collaboration with Compedia ©

Labdisc

It's time for something new

Specifications





	Labdisc primo	Labdisc enviro	Labdisc gensci	Labdisc physio	Labdisc biochem
Science parameter	ELEMENTARY SCIENCE	ENVIRONMENT	GENERAL SCIENCE	PHYSICS	BIOLOGY & CHEMISTRY
Supported platforms	Standalone, PC, MAC, iPad, Linux	Standalone, PC, MAC, iPad, Linux	Standalone, PC, MAC, iPad, Linux	Standalone, PC, MAC, iPad, Linux	Standalone, PC, MAC, iPad, Linux
Built-in sensors	Motion, GPS, Heart Rate, Light, Sound Level, Ambient Temperature and External Temperature	Barometer, Sound Level, Colorimeter, Dissolved Oxygen (electrode sold separately), GPS, IR Temperature, pH, Relative Humidity, Temperature, Turbidity, Universal Input	Air Pressure, Current, GPS, Light, Microphone, Motion, pH, Relative Humidity, Temperature, Universal Input, Voltage	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), GPS, Heart Rate, Light, pH, Relative Humidity, Thermocouple, Turbidity, Universal Input
GPS data logging	Yes	Yes	Yes	No	Yes
Remote data logging	Yes	Yes	Yes	Yes	Yes
Max. sampling speed	100/s	10/s	24,000/s	24,000/s	100/s
Sampling resolution	12-bit	12-bit	12-bit	12-bit	12-bit
Int. measurement storage	128,000 samples	128,000 samples	128,000 samples	128,000 samples	128,000 samples
Int. rechargeable battery	LiPO 7.2 V	LiPO 7.2 V	LiPO 7.2 V	LiPO 7.2 V	LiPO 7.2 V
Battery life	> 150 hours	> 150 hours	> 150 hours	> 150 hours	> 150 hours
Display	Graphical LCD 64 x 128 pixels	Graphical LCD 64 x 128 pixels	Graphical LCD 64 x 128 pixels	Graphical LCD 64 x 128 pixels	Graphical LCD 64 x 128 pixels
Keypad	Yes	Yes	Yes	Yes	Yes
USB communication	USB 2.0	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	Bluetooth V2.0
Automatic sensor testing	Yes	Yes	Yes	Yes	Yes
Auto sensor calibration	Yes	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	ø = 132, H = 45 mm
Weight	300 gr.	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	-10 to 50 °C
Standard compliance	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC
External power supply	100-240 V AC/12 V DC 1A	100-240 V AC/12 V DC 1A	100-240 V AC/12 V DC 1A	100-240 V AC/12 V DC 1A	100-240 V AC/12 V DC 1A
Software	GlobiWorld and GlobiLab-Junior	GlobiLab	GlobiLab	GlobiLab	GlobiLab
Accessories	Table stand, lab stand adapter, carry bag (optional)	Table stand, carry bag (optional)	Table stand, lab stand adapter, carry bag (optional)	Table stand, lab stand adapter, carry bag (optional)	Table stand, carry bag (optional)

Patent pending

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

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