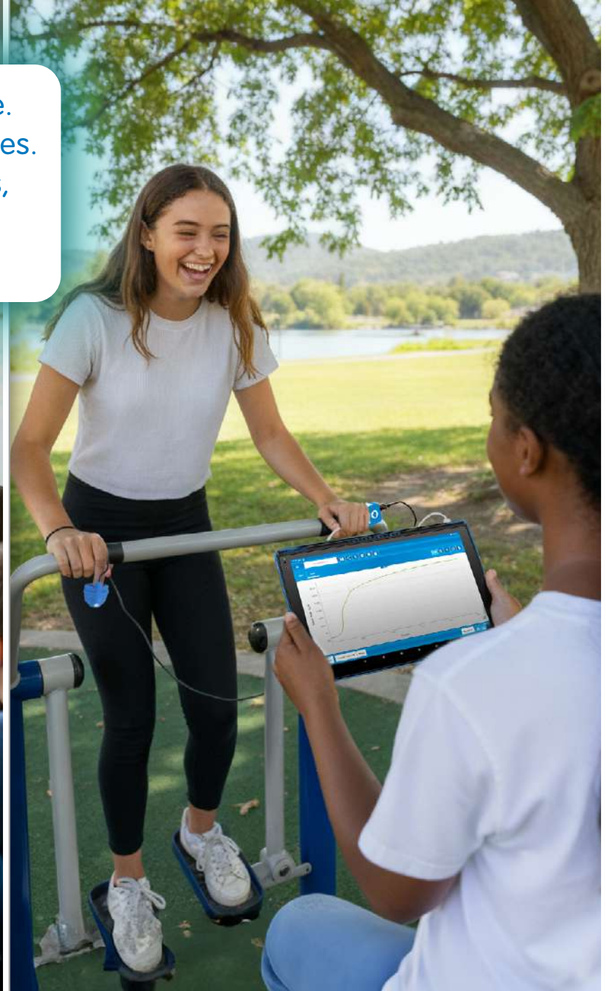
einstein™
by Fourier Education

einstein™ Catalog 2026

If your plan is for one year, plant rice.
If your plan is for ten years, plant trees.
If your plan is for one hundred years,
educate children."

Confucius



Fourier 2026 Vision: Empowered Science

Across the world, education systems aim to prepare students for a future shaped by technology and AI, where exploration, questioning, and analysing are essential skills. In 2026, **Fourier** brings this vision to science education helping students and teachers by providing tools that make science education more meaningful. It's not about more technology, it's about better ways to explore, understand, and connect.

To meet this challenge, **Fourier** introduces **Ask AInstein**, a dedicated AI science assistant designed to support the educators through an intuitive, built-in chat that provides instant, clear explanations on science topics, in any language.

Ask AInstein is seamlessly embedded across all of Fourier's applications, supporting **hands-on science education from anywhere** - in the classroom, outdoors, or at home.

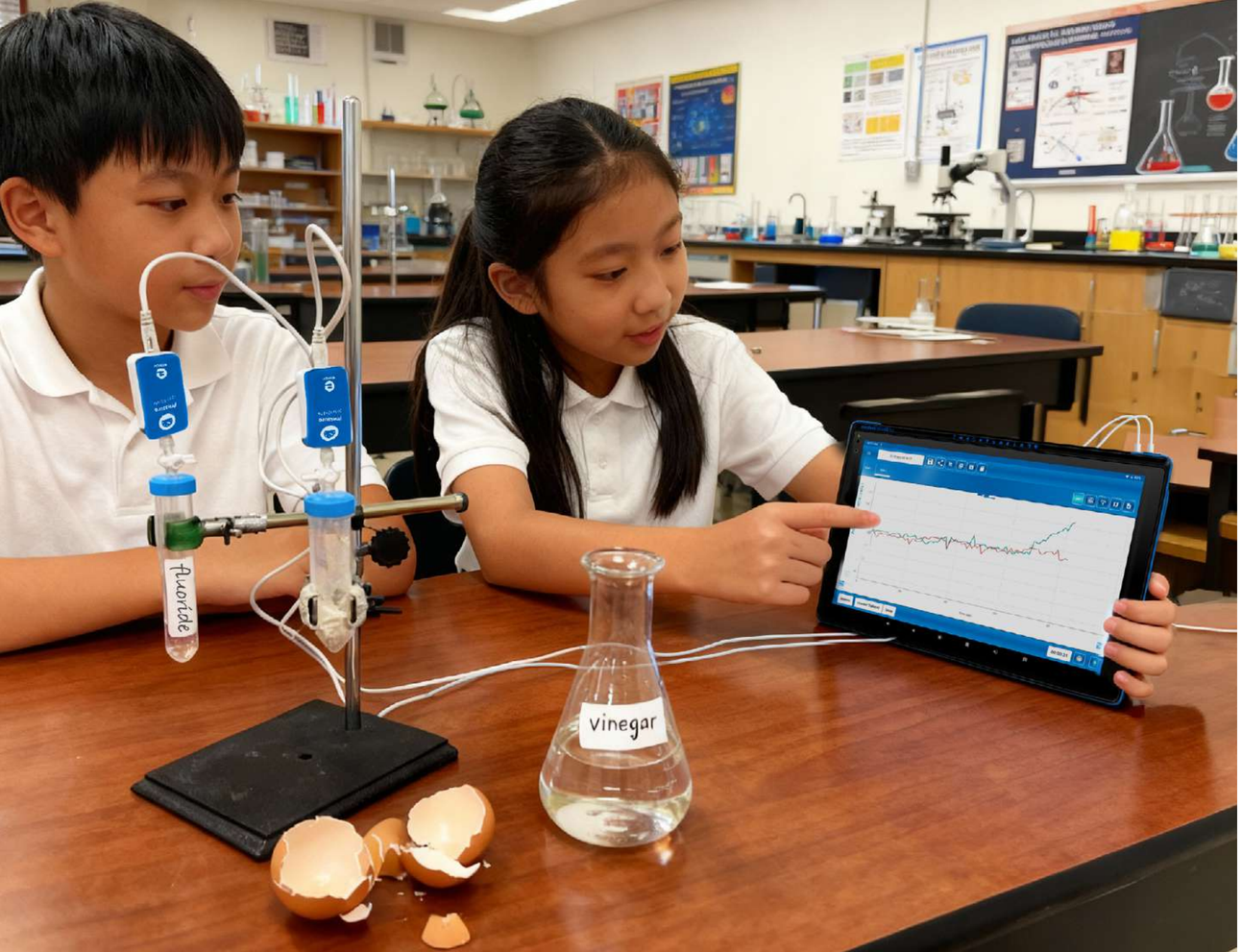
Together with MiLABEx's additional features like the new **Research sub-app**, which helps students design and document research investigations, alongside a **comprehensive free to use library of over 350 AI translated science experiments**, an **upgraded Weather Station experience**, and others, the **einstein**™ platform continues to create a meaningful learning experience.

Teach Science!

FOURIER education

einstein™ by Fourier Education

TOP EDTECH COMPANIES 2025 TIME MAGAZINE WITH STATISTA



MiLABEx

The **MiLAB**Ex contains 4 sub-apps:

- **Lab** - Start an experiment
- **Workbook** - Create and share experiments
- **Weather Station** - Monitoring climate parameters
- **Research** - Conduct a research

einstein™Data Loggers

einstein™Tablet3Pro

Android all-in-one science tablet

+14 built-in sensors

einstein™LabMateII

Transform any screen device into a science lab

+8 built-in sensors

einstein™LabMateII Lite

Customizable logger W/O Sensors

einstein™Sensors

Over 60 sensors that cover all curricula subjects

einstein™ innovations 2026 6

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einstein™ innovations
New in 2026

Ask AInstein

Is a feature in the MiLABEx software that enables intelligent support and instant accessibility into the science classroom, turning every experiment into a seamless, global learning experience

Learn more

AI Translations

Translate workbooks to your local language in seconds

Science 350+ Activities

What language would you like to use?

German

Apply

New Sensors

that cover more curricula topics

Colorimeter

ORP Sensor

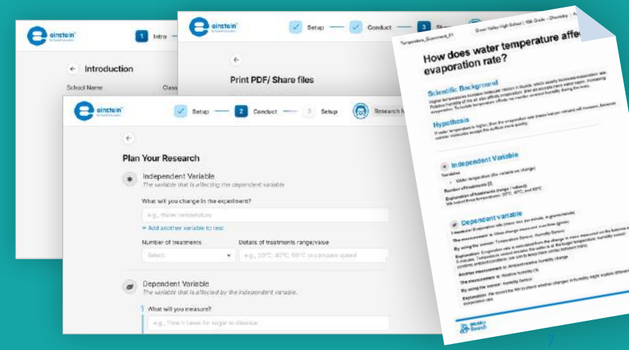
Infrared Sensor

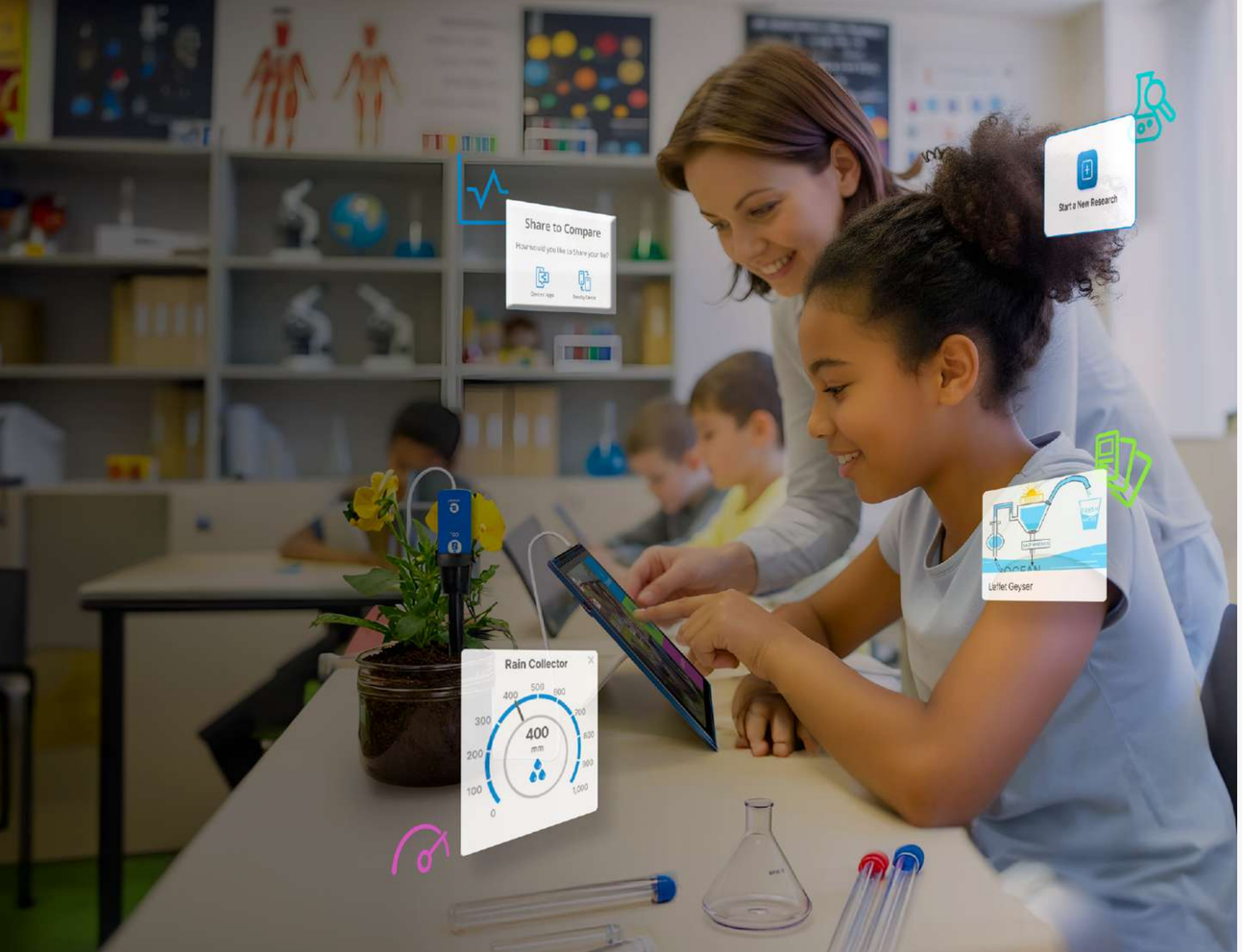
coming soon

MiLABEX Research

Application integrated in the MiLABEx

The Research sub-app guides the student through the complete scientific process - from defining a question and planning methodology to connecting experiments, analyzing results, and building a full research project within MiLABEx.





MiLABEx

The **MiLAB**Ex contains **4** sub-apps:

Lab
Conducting science activities

Workbooks
Create and share experiments

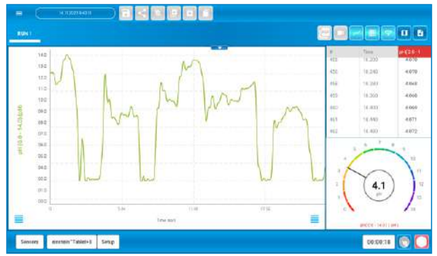
Weather Station
Monitoring climate parameters

Research
coming soon

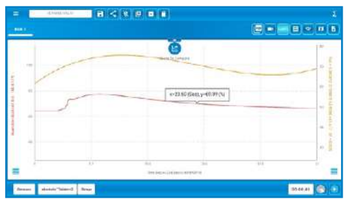
Build a research

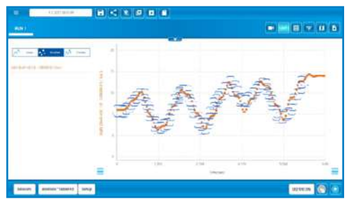
The **Lab** Sub-app - start an experiment

The Lab sub-app is designed to perform a vast range of experiments that suit curricula topics. Plan your experiment, define sensor settings and experiment parameters, run the experiment, analyze data collection, and share it with the teacher and colleagues.

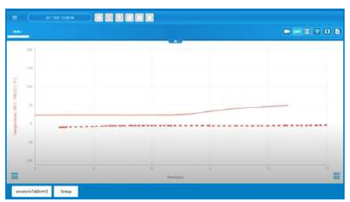


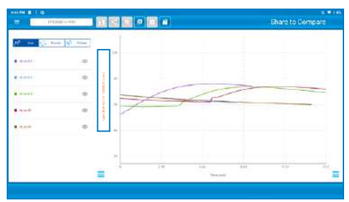
Examples of Lab's features

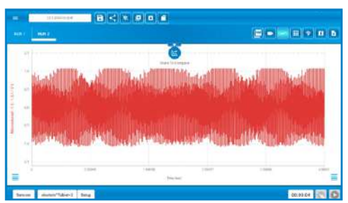

The Curve Fit


The Error Bars


Split screen


Prediction


Share to compare


Fast Fourier Transform

Online/Offline capabilities

Connect several sensors in parallel for multiple experiments

High sampling rate, long experiment duration

Variety of visual display options

Multiple data presentations

User-friendly interface for teachers and students

Advanced data exploration

Prediction tool hypothesis Vs reality

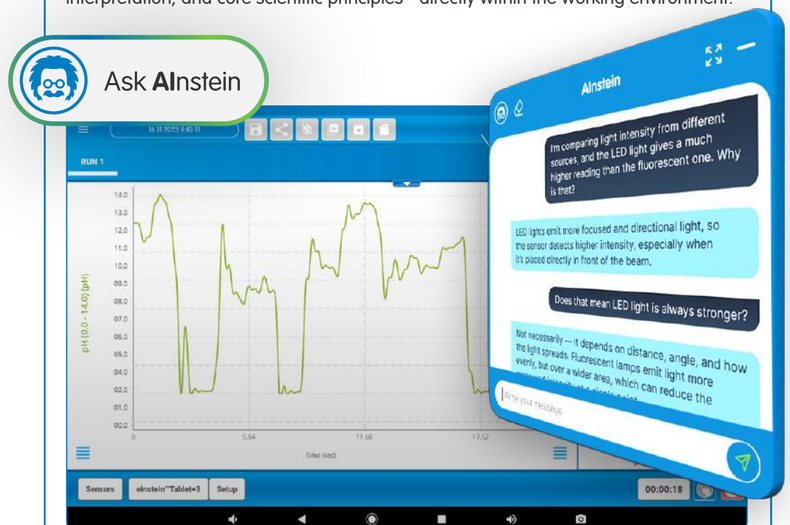
Split Screen See above

Share to Compare See above

NEW

Ask AInstein - live in MiLABEx

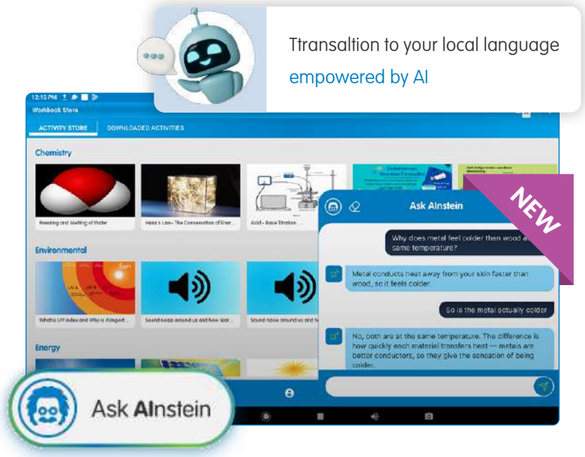
Ask AInstein™ is an integrated AI assistant within the **MiLAB**Ex software, designed to support teachers and students during hands-on science investigations.
It provides instant answers to questions about experiment setup, sensor usage, data interpretation, and core scientific principles - directly within the working environment.



The **Workbooks** sub-app

Download & Run experiments directly from the Workbook sub-app

Users can download over 350 activities, free of charge, divided by curriculum topics and languages powered with AI-based capabilities (no need for login or sign up). Each workbook comes with a PDF/video detailing the experiment setup and explanation, as well as a predefined experiment setup.



Design your own experiment

Build and share your content and predefined experiment setup

1

Create and name the activity, description and category

2

Upload content-experiment PDF with detailed information on the activity

3

Define experiment setup-relevant sensors, sample rate, duration, etc.

4

Optional- upload video for more explanations and examples

5

View, save and share with your colleagues and students

The **Weather Station** sub-app

This sub-app functions as a real-time weather monitoring dashboard, displaying an array of climate-related parameters such as temperature, humidity, barometric pressure, UVI, dew point, and heat index. The Weather Station enables immediate visualization of current weather conditions, facilitating a deeper understanding of climatology whether you're in a classroom setting or exploring the outdoors.

The Weather Station is applicable with any of the 2nd generation and up of the **einstein**™ data loggers.

Virtual Science Lab Application

MYQ

MYQ, a web based platfrom, empowers students to gain a profound understanding of scientific principles and core ideas, as well as foundational concepts in the realm of programming. It nurtures logical thinking skills and, more broadly, teaches students how to tackle challenges and solve problems with firm confidence across various aspects of life.

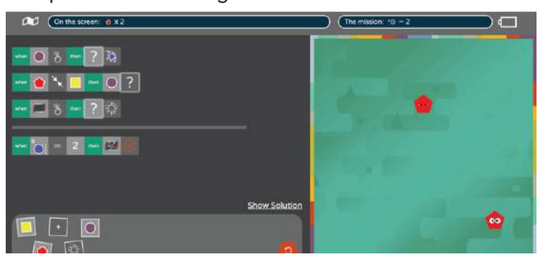
MYQ offers 4 different platforms

Pixel

Computational Thinking. Grades 1-3

Spark

Computational Thinking. Grades 3-6

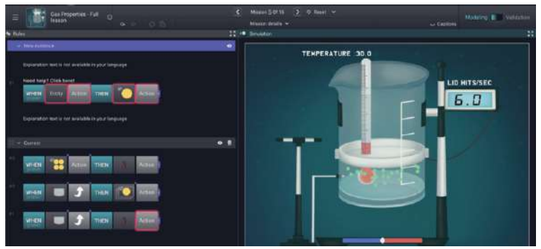


Pixel and **Spark** foster Computational Thinking in Grades 1-3 and 3-6, respectively. These applications introduce young minds to the realm of logical reasoning through immersive characters and enjoyable activities. They provide students with valuable insights into fundamental concepts like cause and effect, abstraction, conditional reasoning, and the ability to dissect complex problems into more manageable components.

Cosmos

Science. Grades 7-9

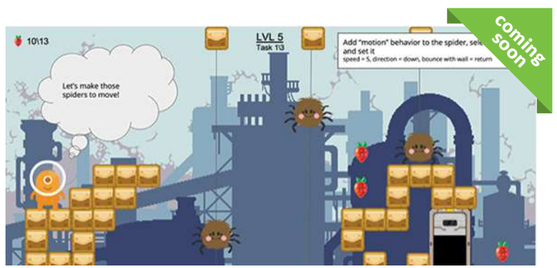
Cosmos conveys scientific principles for Grades 7-9 by exploring real-life examples and facilitates a comprehensive understanding of physical, biological, and chemical phenomena. Cosmos teaches the skills of research, model-building, hypothesis testing, learning from mistakes, and internalizing the fundamental ideas that form the basis of science.



Gamelab

Game design and development. Grades 5-9

Gamelab is a platform that empowers students in Grades 5-9 to effortlessly design digital games, craft vibrant spaces with diverse graphics and engaging animations, set rules, and plan the plot as they desire. Gamelab allows children to imagine, create, play, and share their creations with friends.



For more info visit www.myqedu.com

"...The value of an education
is not the learning of many facts, but the training of the mind to think something that cannot be learned from textbooks"

Albert Einstein

einstein™ Data Loggers

einstein™Tablet3Pro
Android all-in-one science tablet
+14 (including camera) built-in sensors

OR

einstein™LabMateII
Transform any screen device into a science lab
+8 built-in sensors

OR

einstein™LabMateII Lite W/O Sensors
No internal sensors included

einstein™ Data Loggers

einstein™ Tablet3 Pro

- Full Android 10.1" Tablet, with Android 14 OS
- 14 Built In Sensors (including Camera), commonly used in most science curricula.
- Connects up to additional 8 external sensors, from over 60 in the **einstein**™ catalog
- Designed to align with NGSS and Common Core standards.

Features

- 10.1" screen
- Android™ 14 OS
- Octa-Core(2 Core A73+6 Core A53)
- MicroSD card slot
- Camera x 2 (front & back)
- External display - up to 4K
- WIFI 5
- Bluetooth5™
- Battery 10000mAh
- Fast Charging: USB-C PD and Micro USB
- Update software Notifications

The **einstein**™Tablet**3**Pro includes free license to use for the **MiLAB**Ex software with its 4 sub-apps:

The **Lab** for performing experiments, the **Weather Station** sub-app for monitoring and exploring climate metrics, the **Workbook** sub-app for building, downloading and sharing content from everywhere, and the **Research** sub-app for building a research investigation

Can be downloaded from the **einstein**™ website's download center and App stores

Compatible with over **60** **einstein**™ sensors

Collects data from up to **20** sensors simultaneously

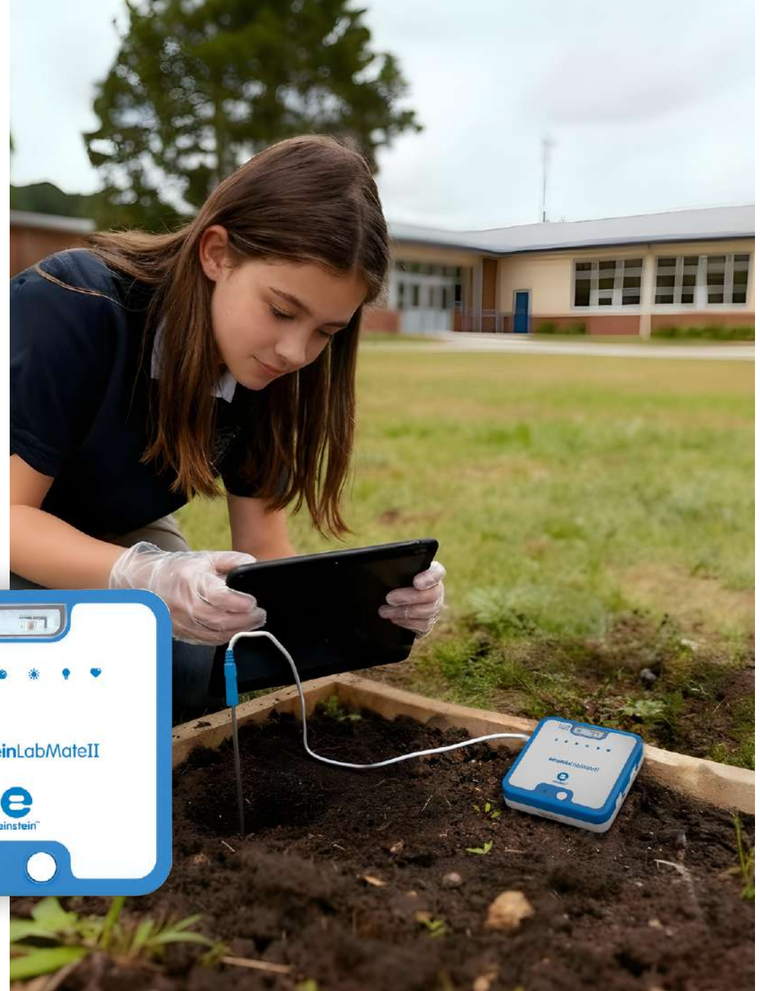
14 Built-in sensors

- UVI
- Light
- Temperature
- Heart Rate
- Humidity
- Accelerometer
- GPS/Location
- Microphone
- Sound
- Barometric Pressure
- Heat Index
- Dew Point
- Par
- Video

einstein™ LabMateII

The ideal solution for schools already equipped with tablets or computers

- Features 8 built-in sensors commonly used in most science curricula
- Connects to up to 8 external sensors simultaneously, from over 60 Sensors available in the **einstein**™ catalog
- Pairs with any tablet, computer, or smart phone via BLE or micro-USB port
- Internal memory of up to 750k samples
- Keeps collecting and saving data even when it's disconnected from the screen device
- Easier and faster Bluetooth connection
- Conduct offline experiments from everywhere and export the data to any of your devices



Compatible with over

60 **einstein**™ sensors

Collects data from up to

16 sensors simultaneously

einstein™ LabMateII

8 Built-in sensors

Features

- Heart Rate
- Temperature
- Humidity
- Barometer
- UVI
- Light
- Heat Index
- Dew Point

- High Sample rate
- Connect up to 8 additional (external) Sensors
- Offline mode experiments
- Indoor and outdoor experiments
- Auto Sensors recognition
- Internal memory up to 750K samples
- Long lasting Battery
- USB Connection
- Long wireless range Bluetooth (BLE)

einstein™ LabMateII Lite W/O Sensors

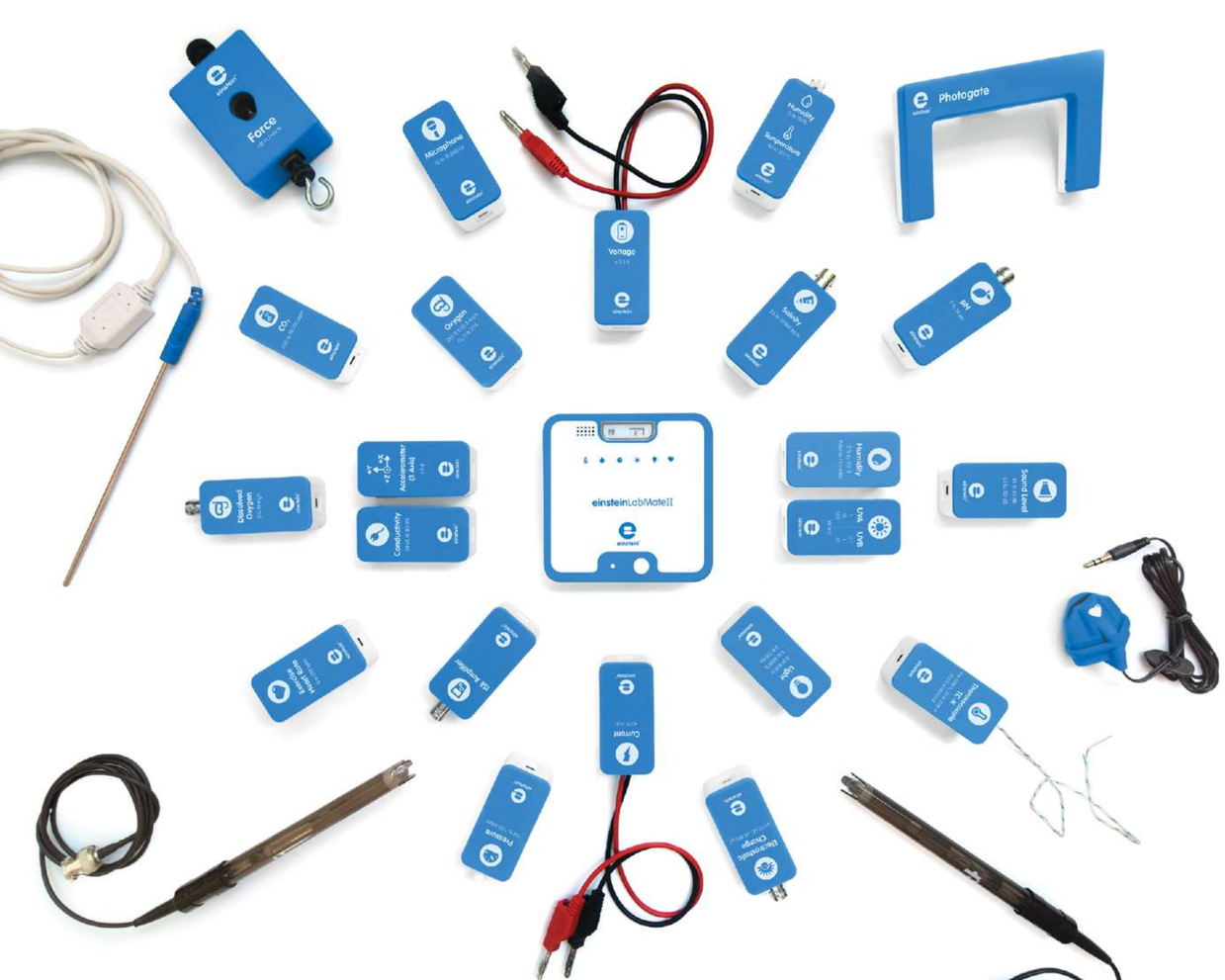
The LabMateII Lite offers an affordable and adaptable solution for educators & students, enabling logger customization by adding external sensors tailored to specific educational needs and budget.

Product Overview:

- **Modular Design:** No pre-installed internal sensors, enabling tailored configurations.
- **Connectivity:** via USB connection (optional- Blutooth connection)
- **Power Supply** via power cable, (optional- internal battery).
- **Sensor Compatibility:** Connect up to 8 external sensors simoutansly from over 60 sensors available in the **einstein**™ catalog that cover most curricula topics.

The **einstein**™ LabMateII and LabMateII Lite include free license to use for the **MiLAB**Ex software with its 4 sub-apps: The **Lab** for performing experiments, the **Weather Station** for monitoring and exploring climate metrics, and the **Workbook** for building, downloading and sharing content from everywhere

Can be downloaded from the **einstein**™ website's download center and App stores



einstein™Sensors

over 60 sensors for accurate data-collection and inquiry-based experiments

Fourier's Recommended **einstein™ Bundles** per subject learned

- Primary School
- Middle School
- High School and University

Each bundle comes with **einstein**™Tablet**3**Pro or **einstein**™LabMateII at your choice, with all it's internal sensors, as well as with the **MiLAB**Ex software, with its free license to use, and 3 sub-apps - The Lab, WorkBooks and Weather Station

einstein™Tablet**3**Pro
Includes **14** Built-in sensors (See page 20)

OR

einstein™LabMateII
Includes **8** Built-in sensors
(See page 22)

OR

einstein™LabMateII Lite
W/O Sensors
(See page 23)

Biology Bundle


Temperature Sensor (-40 to 140°C)


Humidity Sensor


Light Sensor


pH Sensor


Conductivity Sensor


CO2 Sensor


Colorimeter Sensor


Pressure Sensor (20-400 kPa)


Combined Oxygen Sensor


Ethanol Sensor


Turbidity Sensor


PAR Sensor

Physics Bundle


Temperature Sensor (-40 to 140°C)


Current Sensor (250 mA)


Voltage Sensor (2.5V)


Light Sensor


Distance Sensor


Force Sensor


Pressure Sensor (20-400 kPa)


Sound Sensor


Acceleration Sensor


Electrostatic Charge Sensor


Magnetic (Triple Axis) Sensor


Photogate Sensor


Smart Pully Sensor


Geiger Muller Sensor


PAR Sensor

Chemistry Bundle


Temperature Sensor (-40 to 140°C)


Current Sensor (250 mA)


Voltage Sensor (2.5V)


Ammonium Sensor, Bromide Sensor, Calcium Sensor, Chloride Sensor, Fluoride Sensor, Lead Sensor, Nitrate Sensor, Potassium Sensor, Sodium Sensor


Conductivity Sensor


pH Sensor


Pressure Sensor


Drop Counter Sensor


Ethanol Sensor

Environmental


Temperature Sensor (-40 to 140°C)


Anemometer Sensor


Dissloved CO2 Sensor


Flow Rate Sensor


Light Sensor


Sound Sensor


Soil Moisture Sensor


Rain Collector


Dissolved Oxygen 0 to 12.5 mg/L


Combined Oxygen 0 to 14 mg/L


ISE Sensors

PM* Sensor

Human Physiology Bundle


Surface Temperature Sensor


Humidity Sensor


Heart Rate Sensor


Heart Rate Exercise Sensor


Dissloved CO2 Sensor


Sprirometer Sensor


Blood Pressure Sensor


CO2 Sensor


EKG

*The sensor is appicable with version 2 and up of the LabMate

einstein™ Environmental & Renewable Energy Bundles

Dedicated bundles for students that enable focusing on world **enviromental and climate challenges**. Promote curiosity, enable creative thinking, boost wonder and questioning, and take action in collaboration and communication.

einstein™Tablet3Pro
Includes 14 Built-in sensors

OR

einstein™LabMateII
Includes 8 Built-in sensors

einstein™LabMateII Lite
W/O Sensors

Climate Monitoring	Temperature Sensor	Humidity Sensor	Light Sensor	UVI Sensor	Barometric Pressure	Dew Point	Heat Index	Anemometer Sensor	Rain Collector
Water Qulity	pH Sensor	Conductivity/salinity Sensor	Temperature Sensor	Dissolved Oxygen Sensor	Turbidity Sensor	Dissolved CO_2 sensor			
Soil quality	Soil Moisture Sensor	Turbidity Sensor	Temperature Sensor	pH Sensor	Ammonium Sensor	Bromide Sensor	Calcium Sensor	Chloride Sensor	Fluoride Sensor	Lead Sensor	Nitrate Sensor	Potassium Sensor	Sodium Sensor
Air Quality	CO_2 Sensor	Dissolved Oxygen Sensor	*PM Sensor	Temperature Sensor	Humidity Sensor								
Solar Power	Voltage Sensor	Current Sensor	Temperature Sensor	UVI Sensor	Terra Nova Solar Panel: Solar cell	Terra Nova Solar Panel: component holder							

*The sensor is appicable with version 2 and up of the LabMate

einstein™ Sensors

Explore over 60 external sensors that cover most curricula topics:

Biology

- Anemometer 32
- Blood Pressure Sensor 33
- CO2 Sensor 34
- CO2 Sensor (100K)
- Colorimeter 34
- Conductivity Sensor 34
- Dew Point 35
- Drop Counter 35
- EKG Sensor 35
- Ethanol Sensor 36
- Flow Rate Sensor 36
- GPS/ Location 37
- Heart Rate (Exercise) 37
- Heart Rate (Pulse)
- Humidity + Temperature Sensor 38
- Humidity Sensor 38
- Light Sensor (Triple range) 38
- Oxygen (Dissolved) Sensor 39
- Oxygen Sensor (combined)
- PAR Sensor 40
- pH Sensor 40
- Photogate Sensor 40
- Pressure Sensor 41
- Pressure (Barometric)
- Salinity Sensor 41
- Soil Moisture 42
- Temperature (Internal) Sensor 43
- Temperature Sensor
- Surface Temperature Sensor
- Temperature PT-100 Sensor
- Thermocouple
- Turbidity Sensor 43
- UV Index (Internal) 44
- UVA/ UVB Sensor

Chemistry

- Ammonium Sensor 32
- Barometric Pressure 41
- Calcium Sensor 33
- Chloride Sensor 33
- CO2 Sensor 34
- CO2 Sensor (100K)
- Colorimeter 34
- Conductivity Sensor 34
- Current Sensor (±2.5 A) 35
- Current Sensor (±250 mA)
- Drop Counter 35
- Ethanol Sensor 36
- Fluoride Sensor 36
- Geiger Muller Counter 36
- Humidity Sensor 38
- Lead Sensor 38
- Light Sensor (Triple range) 38
- Nitrate Sensor 39
- Oxygen (Dissolved) Sensor 39
- Oxygen Sensor (combined)
- pH Sensor 40
- Potassium Sensor 40
- Pressure Sensor 41
- Pressure (Barometric)
- Salinity Sensor 41
- Sodium Sensor 42
- Temperature (Internal) Sensor 43
- Temperature Sensor
- Surface Temperature Sensor
- Temperature PT-100 Sensor
- Thermocouple
- Turbidity Sensor 43
- UVA/ UVB Sensor 44
- Voltage Sensor (Triple range) 44

Physics

- Accelerometer 32
- Accelerometer (3 axis)
- Colorimeter 34
- Current Sensor (±2.5 A) 35
- Current Sensor (±250 mA)
- Distance Sensor 35
- Electrostatic Charge Sensor 36
- Force Sensor 36
- GPS/ Location 37
- Light Sensor (Triple range) 38
- Magnetic Field Sensor (Triple Axis) 39
- Microphone 39
- PAR Sensor 40
- Photogate Sensor 40
- Rotary Motion Sensor 42
- Smart Pulley 42
- Sound Sensor 42
- Temperature (Internal) Sensor 43
- Temperature Sensor
- Surface Temperature Sensor
- Temperature PT-100 Sensor
- Thermocouple
- UVA/ UVB Sensor 44
- Voltage ±30 TRMS 44
- Voltage Sensor (±2.5V)
- Voltage Sensor (±25V)

Environmental science

- Ammonium Sensor 32
- Anemometer 32
- Barometric Pressure 41
- Bromide Sensor 33
- Calcium Sensor 33
- Chloride Sensor 33
- CO2 Sensor 34
- CO2 Sensor (100K)
- Colorimeter 34
- Conductivity Sensor 34
- Dew Point 35
- Flow Rate Sensor 36
- Fluoride Sensor 36
- Geiger Muller Counter 36
- GPS/ Location 37
- Heat Index 38
- Humidity + Temperature Sensor 38
- Humidity Sensor 38
- Lead Sensor 38
- Light Sensor (Triple range) 38
- Nitrate Sensor 39
- Oxygen (Dissolved) Sensor 39
- Oxygen Sensor (combined)
- pH Sensor 40
- PM Sensor 40
- Potassium Sensor 40
- Pressure Sensor 41
- Pressure (Barometric)
- Rain Collector 41
- Salinity Sensor 41
- Sodium Sensor 42
- Soil Moisture 42
- Sound Sensor 42
- Temperature (Internal) Sensor 43
- Temperature Sensor
- Surface Temperature Sensor
- Thermocouple
- Turbidity Sensor 43
- UV Index (Internal) 44
- UVA/ UVB Sensor

Human Physiology

- Blood Pressure Sensor 33
- CO2 Sensor (100K) 34
- EKG Sensor 35
- Heart Rate (Exercise) 37
- Heart Rate (Pulse)
- Oxygen (Dissolved) Sensor 39
- Spirometer 42

Electricity & Magnetic field

- Current Sensor (±2.5 A) 35
- Current Sensor (±250 mA)
- Electrostatic Charge Sensor 36
- Voltage ±30 TRMS 44
- Voltage Sensor (±2.5V)
- Voltage Sensor (±25V)
- Voltage Sensor (Triple range)
- Magnetic Field Sensor (Triple Axis) 39

Water Quality

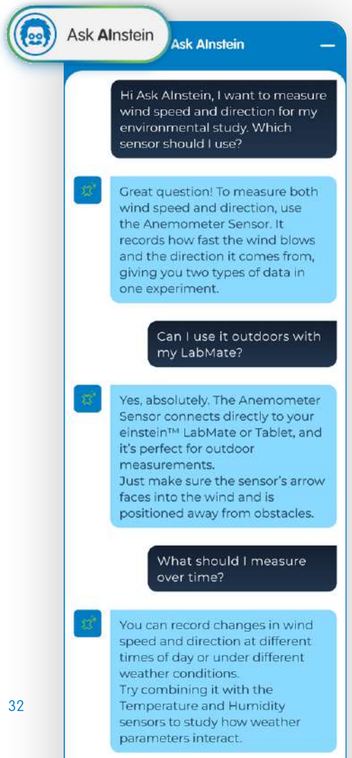
- Conductivity Sensor 34
- Oxygen (Dissolved) Sensor 39
- pH Sensor 40
- Salinity Sensor 41
- Temperature Sensor 43
- Turbidity Sensor 43

Accessories 45

- Calorimeter
- Dynamic System
- Picket Fence
- Pressure Kit
- Terra Nova Solar Kit
- Waterproof Sleeve for CO_2 Sensor
- Pendulum

einstein™ Sensors

Explore the full range of sensor data and technical specifications through Ask AInstein inside MiLABEx.



Accelerometer

An **einstein™ Tablet3Pro** built-in sensor

Range: ±2g

In the lab, use these sensors to measure the acceleration of a moving cart, pendulum, or falling body or go outdoors to study acceleration of vehicles, amusement park rides, bungee jumpers, and other moving objects.

ENACL138

Accelerometer

Range: ±6g (±49 m/s2) along 3 axes

Ammonium Sensor with Electrode *

Concentration Range:
5 µM to 1M or 0.1 ppm to 14,000 ppm

Easily measure the ammonium ion (NH_4^+) level of a solution. Use it to study water quality, determine the ammonium level in foodstuffs and more.

*Electrode also sold separately

ENAMN020A

Anemometer

Wind Speed Range:
4 km/h to 280 km/h; 2.5 mph to 174 mph

Wind Direction Range:
0° to 360°

This 2-in-1 sensor measures wind speed and direction at different daily intervals or over a longer period.

ENANM012A

Blood Pressure Sensor

Range: 0 to 375 mmHg

Measure blood pressure before and after exercise; investigate how blood pressure changes during the day or after physical activity.

ENBLD098

Bromide Sensor with Electrode *

Concentration Range:
0.5 µM to 1 M or 0.4 to 79,900 ppm

Easily measures the amount of bromide in a solution. Use it to study bromide levels in soil and water.

* Electrode also sold separately

ENBRO048

Calcium Sensor with Electrode *

Concentration Range:
0.5 µM to 1M or 0.02 ppm to 40,000 ppm

Measure the level of calcium in any solution in activities such as determining the hardness of water.

* Electrode also sold separately

ENCAL-A019A

Chloride Sensor with Electrode *

Concentration Range:
5 µM to 1M or 1.8 ppm to 35,500 ppm

Study levels of chloride in fertilizers or conduct water quality studies with this sensor.

* Electrode also sold separately

ENCHL-A018A

CO_2 Sensor

Range: 350 to 10,000 ppm

This sensor can be used to measure a wide variety of CO_2 concentrations during photosynthesis and chemical reactions in biology and chemistry labs.

ENCO2B040A

CO_2 Sensor

Range: 350 to 10,000 ppm

This sensor can be used to measure a wide variety of CO2 concentrations during photosynthesis and chemical reactions in biology and chemistry labs.

ENCO2B040A

Current Sensor

Range: ±2.5 A

These broad differential sensors are capable of measuring both direct and alternating current.

ENCRN006

Current Sensor

Range: ±250 mA

ENCRN005

Dew Point

An **einstein**™Tablet**3**Pro built-in sensor

Range: °C or °F

The temperature at which a vapor (such as water) begins to condensate. Since water vapor is also affected by the humidity of the air, the temperature and humidity sensors are used to measure dew point.

Colorimeter*

Wavelength:
Blue (480 nm) | Green (500 nm) | Red (650 nm)

Designed to determine the concentration of a solution by measuring its color intensity, students can use this sensor to study the effect of light on chlorophyll levels in plants, the Beer-Lambert Law and more.

* Sensor design may change

ENCOL-A185

Conductivity + Temperature with Electrode *

Conductivity range: 0.05 - 80 mS

Temperature range: 0-80°C

Use this sensor to monitor changes in conductivity when dissolving salts in water, monitoring bodies of water for pollution or water salinity testing.

* Electrode also sold separately

ENCNT435A

Distance Sensor

Range: 0.2 to 10 m

Measure the distance of static and moving objects both near and far. Students can use this versatile sensor to investigate dynamic cart motion on a track, measure free fall acceleration and more.

ENDST020

Drop Counter Sensor

Range: 0 to infinity drops

Accurately record the volume of titrant added with this optical sensor.

* Sensor design may change

ENDRP-AD100

EKG Sensor

Range: 0 to 3 V

An electrocardiogram – abbreviated as EKG or ECG – is a test that measures the electrical activity of the heartbeat. With each beat, an electrical impulse (or wave) travels through the heart. This wave causes the muscle to squeeze and pump blood through the body.

ENEKG189

Electrostatic Charge Sensor

Range: ±0.25 µC | ±0.025 µC

This dual range, sensor can be used in activities like measuring the charge produced by friction, measuring charge by induction, investigating conductive and insulating materials and exploring the relationship between the charge and the voltage drop across a parallel plate capacitor.

ENCRG261

Ethanol Sensor

Range: 0-4%

Easily measures the amount of ethanol in a solution. Use it to study ethanol as a renewable source of energy and the process of fermentation.

ENETH105

Flow Rate Sensor

Range: 0 to 4.0 m/s

Measure the velocity of water flowing in a river, stream or canal.

ENFLO-A254A

Fluoride Sensor with Electrode *

Concentration Range: 1 µM to saturation or 0.02 ppm to saturation

Easily measures the amount of fluoride in a solution. Use it in agriculture studies and chemistry experiments

* Electrode also sold separately

ENFLU049

Force Sensor

Range: ±10 N | ±50 N

Study friction, simple harmonic motion, impact in collisions or centripetal force with this sensor.

ENFRC272

Geiger Muller Sensor

Range: CPM

This radiation sensor is used in experiments such as demonstrating the random nature of radioactivity, measuring activity vs. Distance of a radioactive source and investigating the effect of different absorbers on radiation.

* Sensor design may change

ENGEM116

GPS

einstein™Tablet**3**Pro built-in sensor

A standard Global Positioning System, helps students add the parameter of location to a variety of experiments.

Heart Rate

A built-in sensor on all **einstein**™ data loggers

Heart Rate Sensor

Range : 0 to 250 bpm | 40-240 bmp (Tablet**3**Pro)

Use these high accuracy sensors to measure an individual's fitness, and how factors such as level of activity, gender and size impact heart rate. In the new **einstein**™Tablet**3**Pro the Haert rate is using the back camera.

ENHRT-A155

Exercise Heart Rate Sensor

Range: 0 to 250 bpm

Use this sensor to compare or monitor heart rates before, during and after brief vigorous activity and monitor the time it takes the heart rate to return to normal.

ENEXRT298

Heat Index

An **einstein**™Tablet**3**Pro built-in sensor

Range: °C or °F

Also known as the apparent temperature is what the temperature feels like to the human body when relative humidity is combined with the air temperature

Humidity
A built-in sensor on all **einstein**™ data loggers

Humidity Sensor

Range: 0 % to 100 % Relative Humidity

Learn about body respiration properties, biotic conditions and research the meteorological connections between humidity and temperature.

* Sensor design may change

ENHMD014

Humidity + Temperature

Range: 0%-100% Relative Humidity | -40 to 125 °C

This highly accurate combined sensor simplifies experiments involving temperature and humidity. New-when connected, it enables dew point and heat index measurement.

ENHMT041

Lead Sensor with Electrode *

Concentration Range:
1 µM to 0.1 M or 0.2 to saturation

Easily measures the amount of lead in a solution and in soil.

* Electrode also sold separately

ENLEA050

Light
A built-in sensor on all **einstein**™ data loggers

Light Sensor

Range: 0-600 lux | 0-6000 lux | 1-128,000 lux (Tablet**3**Pro)

These Light sensors contain a high precision photoelectric cell that measures light intensity in activities such as solar radiation and photosynthesis.

ENLGT009-4

Magnetic (Triple Axis) Sensor

Range: ±20 mT | ± 0.4 mT

Measuring magnetic field strength along three axes, this highly accurate sensor can be used to investigate the effects of the earth's magnetic field, a solenoid's magnetic field and the magnetic field of Helmholtz coils.

ENMGN

Microphone
einstein™Tablet**3**Pro built-in sensor

Microphone Sensor

Range: 35 to 10,000 Hz

These sensors are designed to study the properties of sound waves such as the speed of sound through air and other materials, sound beats or harmonic properties of sound.

ENMCR008

Nitrate Sensor with Electrode *

Concentration Range:
7 µM to 1 M or 0.1 ppm to 14,000 ppm

Conduct water quality studies and easily and accurately measure nitrate ions in aqueous solutions.

* Electrode also sold separately

ENNTR-A017A

Dissolved Oxygen Sensor with Electrode*

Range: 0 to 14 mg/L

Measure oxygen concentration in solutions and fluids. Conduct investigations into oxygen consumption in aquariums and other bodies of water. Built-in temperature compensation makes this sensor highly accurate and easy to use.

* Electrode also sold separately

ENOXT422A

Combined Oxygen Sensor with Electrode*

Range: 0 to 12.5 mg/L DO | 0 to 25% O_2

The oxygen sensor is used to perform experiments in both liquid and gaseous environments, such as measuring oxygen in an aquarium or understanding photosynthesis.

ENOXY-A222

PAR Sensor

A built-in Barometer on all **einstein**™ data loggers

PAR Sensor

Range: Ask your representative

The sensor measures the Photosynthetic Photon Flux Density (PPFD), which corresponds to micromoles of photons per meter squared per second. Ideal for experiments investigating photosynthesis and primary productivity and can be used in science education.

Photogate Sensor

This general-purpose sensor is commonly used for a wide variety of experiments such as studying the swinging of a pendulum, measuring the speed of a rolling object or measuring the speed of colliding objects.

ENFTG137

pH Sensor

with Electrode *

Range: 0 to 14 pH

Measure pH changes during chemical reactions, follow an acid-base titration or examine bodies of water over long periods of time.

* Electrode also sold separately. Also available with a flat electrode

ENPH-A016 and ENPHF052 (for flat)

NEW

PM Sensor

Ranges: 1µM, 2.5 µM and 10 µM

The PM sensor measures floating particulate matter in the air in three

* The sensor is compatible with the **einstein**™Tablet**3**Pro, **LabMateII** and newer versions

Potassium Sensor

with Electrode *

Concentration Range:
7 x 10-6 M to 1M or 0.04 ppm to 39,000 ppm

The Potassium sensor can be used to measure pollution, agricultural fertilizers or the effects of processing food.

* Electrode also sold separately

ENPOT-A008

Pressure (Barometric) Sensor

A built-in Barometer on all **einstein**™ data loggers

Pressure (Barometric) Sensor

Range: 15 to 115 kPa or 0.148 to 1.134 atm or 150 to 1150 mbar
einstein™Tablet**3**Pro renge: 26 to 260 kPa or 0.26 to 1.24 atm or 260 to 1260 mbar

This sensor can be used as an altimeter and as a barometer for various meteorological measurements.

Investigating transpiration, measuring the respiration rate of germinating seeds and examining the Ideal Gas Law.

ENPRS015

Pressure Sensor

Range: 400 Kpa

With their broad range, these Pressure Sensors can be used to monitor a variety of pressure changes.
Use them in class to demonstrate phenomena such as Boyle's Law or Gay-Lussac's Law.

ENPRSO15-4

Rain Collector

Range: 0 to 819 mm

This sensor measures rainfall and is used in a variety of experiments in Climatology and Environmental Studies.

ENRNCOL

Rotary Motion Sensor

Range: ±360°

Examine how objects move, accelerate and swing. This sensor and pendulum accessory help students explore topics such as the effects of gravity on objects in motion.

* Sensor design may change

ENROT-A148

Salinity+Temperature

with Electrode *

Salinity range: 24 to 52000 ppm

Temperature range: 0-80°C

This easy to use sensor measures the salt content of a solution and is ideal for testing water quality.

ENSLT

Smart Pulley Sensor

Range: 0 to 99 m/s

Measure the velocity and acceleration of moving objects. Learn Newton's laws of motion including Newton's second law with this smart pulley.

ENSMP-A122

Sodium Sensor
with Electrode *

Concentration Range:
4 µM to 1 M or 0.1 to 23,000 ppm

Easily measures the amount of sodium in a solution. Use it for agriculture studies, experiments on food and chemistry studies.

* Electrode also sold separately

ENSOD051

Soil Moisture Sensor

Range: 0 to 200 cbar

Measure the soil's moisture electric resistance and convert data into calibrated readings of soil moisture.

ENSOI-A171

Sound Level Sensor

Range: 45 to 80 dB | 65 to 110 dB

Investigate environmental noises, room acoustics, sound level or sound isolation.

ENSND320

Spirometer

Range: ±315 L/min, ±5.25 L/sec Volume: 0-6 L

The Spirometer is a breathing sensor designed to conduct physiology experiments. Based on air speed, the Spirometer calculates the airflow rate and lung capacity of a subject who is breathing into the sensor. By default, the results are shown in liters per second.

ENSPR016

Ambient Temperature
A built-in sensor on all **einstein**™ data loggers

Range: -30°C to 50°C | -15 to 50°C (Tablet**3**Pro)

This internal sensor is useful for measuring ambient temperature and conducting experiments in micro climates.

Temperature Sensor

Range: - 40°C to 140°C or - 40°F to 284°F

This all-purpose temperature sensor is particularly well suited for conducting water and solution temperature measurements.

ENTMP029

Surface Temperature Sensor

Range: -40°C to 140°C or 40°F to 284°F

This high accuracy surface temperature Sensor enables exploration of topics such as skin temperature measurements and the effects of wearing light or dark-colored clothing.

ENTMP060

Temperature PT-100 Sensor

Range: -200°C to 400°C or -328 to 752 F

This Platinum Resistance Thermometer (PRT) is ideal for use in the research of extremely low temperatures and is also a very powerful sensor for monitoring liquids, gases and other materials.

*Sensor design may change

ENTMP027

Thermocouple TC-K Sensor

Range:
0°C to 1200°C | 32°F to 2192°F | 273.15 K to 1473.15 K

The Temperature TC-K sensor can be used in high temperature experiments such as monitoring chemical processes that occur at high temperatures, measuring the different temperature zones of a flame or simply monitoring ovens.

ENTMP025

Turbidity Sensor

Range: 0 to 200 NTU

This sensor measures the cloudiness of water due to industrial processes or environmental pollution. each sensor comes with 5 cuvettes

* Sensor design may change

ENTRB-A095

UV Index

A built-in sensor on all **einstein**™ data loggers

Range : UV Index (Tablet**3**Pro) 1-11
Wave length: 290-390nm

This sensor can be used mainly to measure UVA radiation. In the New **einstein**™Tablet**3**Pro, the internal UV sensor is presenting the data as UV index (UVI)

UVA / UVB Sensor

Range UVA:
320nm - 400 nm | 1 W/m2 | 10 W/m2 | 200 W/m2

Range UVB:
280nm - 320 nm | 100 mW/m² | 1 W/m² | 10 W/m²

Study the UV variations along a fluorescent tube, the invisible light from different sources or fluorescent rocks and dyes.

ENUVAB063

Voltage Sensor

Range: ±30 V
TRMS Range: 0 to 21 V

This sensor not only has a broad range but can also conduct extremely accurate TRMS readings. Measures both AC and DC voltages and can be used in experiments involving EMF and internal resistance, alternative energy, electric circuits, resistance of a wire or Ohm's Law.

ENVLT102

Voltage Sensor

Range: ± 2.5 V

These low and medium range sensors can measure both AC and DC voltage and are used in experiments involving EMF and internal resistance, a light bulb and a diode, I-V characteristics of a diode, electric circuits, resistance of a wire or Ohm's Law.

ENVLT003

Voltage Sensor

Range: ± 25 V

ENVLT001

Voltage Sensor

Triple range: ±1 V | ±10 V | ±25 V

This broad range sensor can measure both AC and DC voltage and is used in experiments involving EMF and internal resistance, a light bulb and a diode, I-V characteristics of a diode, electric circuits, resistance of a wire or Ohm's Law.

ENVLT019

Accessories and Kits

einstein™ splitter

A splitter allows to connect 2 external sensors into one sensor port.

ENSPL011

Pressure Kit

A pressure kit enables the user to expand the use of the pressure sensor so that any of the kit components can be to connect to any other devices

13877

Picket Fence

Drop the picket fence through a photogate to obtain records of position, velocity, and acceleration vs time or to measure gravity

DT260

Pendulum

Explore the fascinating principles of motion, gravity, and harmonic oscillation with the pendulum experiment.

AC015

Waterproof sleeve for CO_2 sensor

A waterproof sleeve for the CO_2 sensor for measuring the CO_2 concentrations in a solution.

CSWCO2

Calorimeter

The Calorimeter contains a heat source that can deliver a heat flux, at a distinct temperature, into a sample and a temperature-measuring device that can read the resultant temperature change.

ENCALMT

Terra Nova Solar Panel

A kit for solar renewable energy experiments that can be connected to all types of **einstein**™ data loggers using the voltage & current sensors.

TN001

Dynamics System

Dynamics System is an ideal accessory for the high school physics laboratory that lets students perform hands-on activities in the field of mechanics, and is also well suited for teaching motion to middle school students.

DT072A

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