

Solution

SWR Solution with SenseDisc
 The SenseDisc Digital Lab Solution is specially designed for primary, junior high and senior high schools. It helps both teachers and students to carry out experiments in Physics, Chemistry and Biology. This solution covers : SenseDisc sensors and dataloggers, experimental sets and SenseDisc iLab software.

Digital Experiment Solution for Primary School Science

Solution

Experimental Equipment

Intelligent
Integrated design



Datalogger

Built-in display
Experiment indoors and outdoors



Digital Experimental System Products

Compact and portable
Free replacement



Sensor

Cartoon interface
Diversification of display forms



Experiment Software

Datalogger and Sensor

SenseDisc

Surround design, the sensor is flexibly embedded in the channel port around the Datalogger, creating a simple cable-free environment for students to explore the scientific world.

The Datalogger has built-in temperature, pressure and acceleration sensors, and equipped with temperature, voltage, light, humidity, oxygen, pressure and heart rate sensors.

Built-in 3.5-inch TFT true color touch screen has the function of offline collection, which can be brought into the classroom or out of the outdoors to complete scientific inquiry.



Software & Apps

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Experimental Equipment

The integrated design helps to get rid of redundant and tedious equipment operation, and the experimental process is safe and stable, creating possibilities for students to explore and research independently.

It has strong applicability, and supports many kinds of experiments, such as "motion law of pendulum, the heat-absorption and heat-dissipation performance of objects with different colors, friction force, the cooling rule of hot water, the labor saving on the slope, and velocity of trolley motion".



Velocity of Trolley Motion



Friction Force



Motion Law of Pendulum



Labor Saving on the Slope



Heat Absorption(Dissipation) Studying Demonstrator



Heat Absorption and Dissipation Demonstrator(Liquid)



Burning Secret

Digital Experiment Solution for Middle School Physics, Chemistry and Biology

Experimental Equipment

*Intelligent
Integrated design*



Datalogger

*Built-in display
Experiment indoors and outdoors*



Digital Experimental System Products

*Compact and portable
Free replacement*



Sensor

*Cartoon interface
Diversification of display forms*



Experiment Software

Datalogger and Sensor

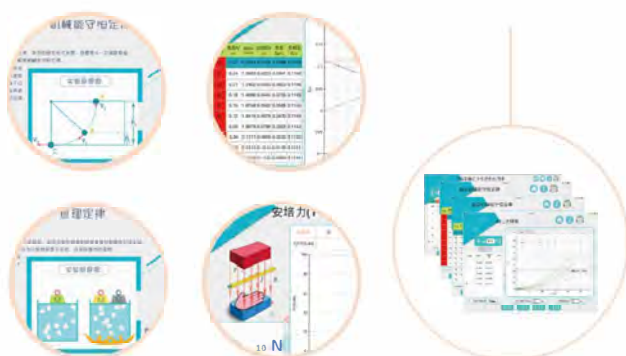
SenseDisc

The sensor is flexibly embedded in the channel port around the Datalogger to create a simple and cable-free experimental environment. With the function of offline collection, it can read, record and store experimental data through the 3.5-inch TFT true-color touch screen in real time, which can be brought into the classroom and out of the outdoors to complete scientific inquiry with great ability.

Built-in ambient temperature, barometer, altimeter, GPS and three-axis acceleration sensor, and equipped with current, temperature, light, sound, heart rate and other sensors, convenient for high school science related experiments.



Software & Apps



Support Windows, android, iOS and Mac OS, equipped with special experimental software, easy to operate, convenient and practical.

Dynamic effect: there is a progress bar in the software value display area. It changes with the experimental value, and the dynamic progress bar can attract students' interest.

User interface visual design:

The software user interface visual design, teachers and students can easily preset experimental conditions and collect data. Some specific experiments can use a preset panel as well as a custom panel.

Experimental Equipment



Buoyancy Law Experiment

It is used in junior high school physics "buoyancy", to explore the amount of buoyancy of an object immersed in a liquid is equal to the gravity of the liquid being displaced by the object.

Taking the textbook as the prototype, the lifting platform of the experimental equipment adopts the gear lifting structure to move the heavy weight from top to bottom. The buoyancy and gravity of boiling water can be measured simultaneously.

Heat Effect of Infrared Ray Experiment

It is used in "invisible light to the human eye" for junior high school physics, to explore that there is a significant thermal effect outside the infrared ray.

The experimental equipment is convenient for students to set up, and the light source is parallel light source, which can explore the heat effect of various colors of light, and solve the problem of not being able to experiment without sunlight.



Wireless Centripetal Force Experiment

Used in the study of "centripetal force" in high school physics, to explore the relationship between centripetal force and angular velocity, radius, quality and time.

The built-in force sensor and Photogate sensor make the experimental data collection more sensitive.

Digital Conservation of Mechanical Energy Experiment

It is used in high school physics "mechanical energy", the law of conservation of mechanical energy is verified by comparing the mechanical energy of a pendulum ball at different heights during its swing with a device similar to a single pendulum.

The velocity and kinetic energy of the pendulum ball can be obtained by the Photogate sensor



Digital Faraday's Law of Electromagnetic Induction Experiment (Motional)

It is used in "Faraday electromagnetic induction" experiment in high school physics, to explore the influence of coil length, cutting line velocity, magnetic field intensity and other factors on induced electromotive force.

The experimental equipment uses the speed generated by the coil falling from different heights to cut the magnetic induction line and generate the induced electromotive force.