

# Yuanda

# Catalogue 2019













# Experimental Data Acquisition System open a new era of digital experimental teaching!

Experimental Data Acquisition System consists of data logger(P8), sensors(P7-P44), Sensor auxiliary equipment and accessories(P6),pad terminal(P5), primary school science inquiry kit(P45-P49).

# **Data Logger**

Our Data Logger adopts modular design with a diamond appearance, which makes it easy to compatible with multiple platforms. Besides connection to the computer, the data logger can also be connected to a Pad and other independent unit.

The Data Logger supports both wired and wireless communications.

Based on specific teaching request, the communication mode can be selected by changing the plugged interface (wired interface and wireless interface).

### **Data Logger**

Design Patent Application No.:ZL201430174802.5

#### LW-D801

- · Modular structure
- · USB communication
- · Hot-plug with interface
- $\cdot$  2 model for option, wired and wireless



### **Wired Interface**

#### LW-A801

IW-A802

Logger

- · Modular structure
- · Hot-plug with Data Logger
- · 4 sensor ports
- · Wired connection with sensors by cables

**Wireless Interface** 

· Modular structure

· Hot-plug with Data

4 sensor portsWireless connection with sensors by cable



#### Wired communication

- ► Plug the Wired Interface into the Data Logger
- ► Connect the data logger to the computer by USB cable
- ▶ Open the software and connect the sensor to data logger by sensor cable







Data Logger + Wired Interface+ USB cable + Sensor cables

# Single-channel Wired Data Logger LW-D805

It can be connected to any kind of sensor, connected

to the computer through MicroUSB cable, and compatible with computer software.



#### Wireless communication

- ► Plug the Wireless interface into the Data Logger
- ► Connect the data logger to the computer by USB cable
- ► Plug it into the sensor and turn on the wireless transmitter









# **Single-channel Wireless Data Logger**

#### LW-D806

Wirelessly connect a wireless transmitter module with



sensorsuipment with wireless function.



Study on respiration of hamster using Pad Terminal

#### Specifications:

High-performance tablet PC is selected as a basic platform to support parallel collection of four channels under wire and wireless conditions, especially it is easy for users to carry out outdoor experiments or dynamic experiments. LW-D803 can be connected to wired interface or wireless interface to realize communication with sensors. LW-D810 can switch from wired to wireless communication by the press button because of the built-in wireless receiving module.



Camera;
 Microphone;
 Interface;
 Card reader;
 Audio output port;
 Power switch;
 MiniVGA;
 USB interface;
 Wired network interface;
 Switch of data logger;
 pilot lamp of data logger.

# **Pad Terminal**

LW-D803/LW-D810



- ▶ 8.9~12.1 inch touch-screen LCD
- ► Over 1G memory
- ► Selectable hard disk capacity
- ▶ Built-in WLAN card
- ► Supporting multiple operating systems
- ► Super-long battery power of 4-5 hours
- ▶ Full transplant of PC software
- ▶ Built-in data logger
- ightharpoonup Operation of stylus
- ▶ High sampling rate

## **Sensor Data Display Module**

Utility Model Patent No.: ZL201420583663.6 Design Patent Application No.:ZL201430380651.9

IW-A804

- · Independent unit for sensor data display Module
- · Highlighted display screen
- $\cdot$  Auto-identify the sensor
- · Real-time data display
- · Rechargeable Lithium battery
- · Support data input into computer



Relative humidity sensor connected to Sensor Data Display Module

# **Sensor Data Transmitter**

LW-A803

- · Used with wireless interface
- · Hot-plug with sensor
- · With built-in lithium battery



### **Sensor Data Transmitter B**

LW-A816

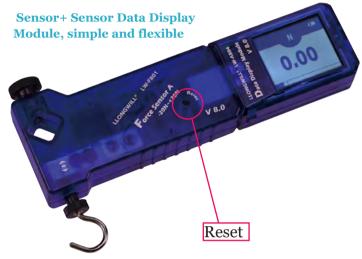
- · Hot-plug with sensor
- · With built-in lithium battery
- · Establish the communication between the sensor and the mobile terminal by Bluetooth
- ·Through scanning the QR code, the wireless communication with Android/iOS platform software(P114-P128) can be built.





#### **Data Storage**

Sensor Data Display Module has data storage function with storage frequency of 4Hz, and the data inputing function that importing software can automatically recognize data recorded in the last sensor. All data displayed on this module can be stored in it and exported into computer by cable. By starting the Data Import software, and clicking "Download" and "Export", the data stored in the Module can be exported into the computer.



#### Reset, Sensor Zero Setting

In order to eliminate drifting and guarantee measurement precision, most of our V8.0 sensors provide Zero Setting function. Operation method of zero setting: Long-press reset button for 3~5 seconds before use.

# **Sensor Adapter**

LW-A810

· Used for some special kinds of V8.0 sensors which can be connected to sensor data display module/wireless transmitter module



#### Accessories LW-A807

The accessories of our experimental data acquisition system include adaptor (A), sensor connection cable (B) and USB cable (C).





