



**Dedicate to the development of
world agricultural instrument**

(ISO9001:2008 Quality Management System Certification)

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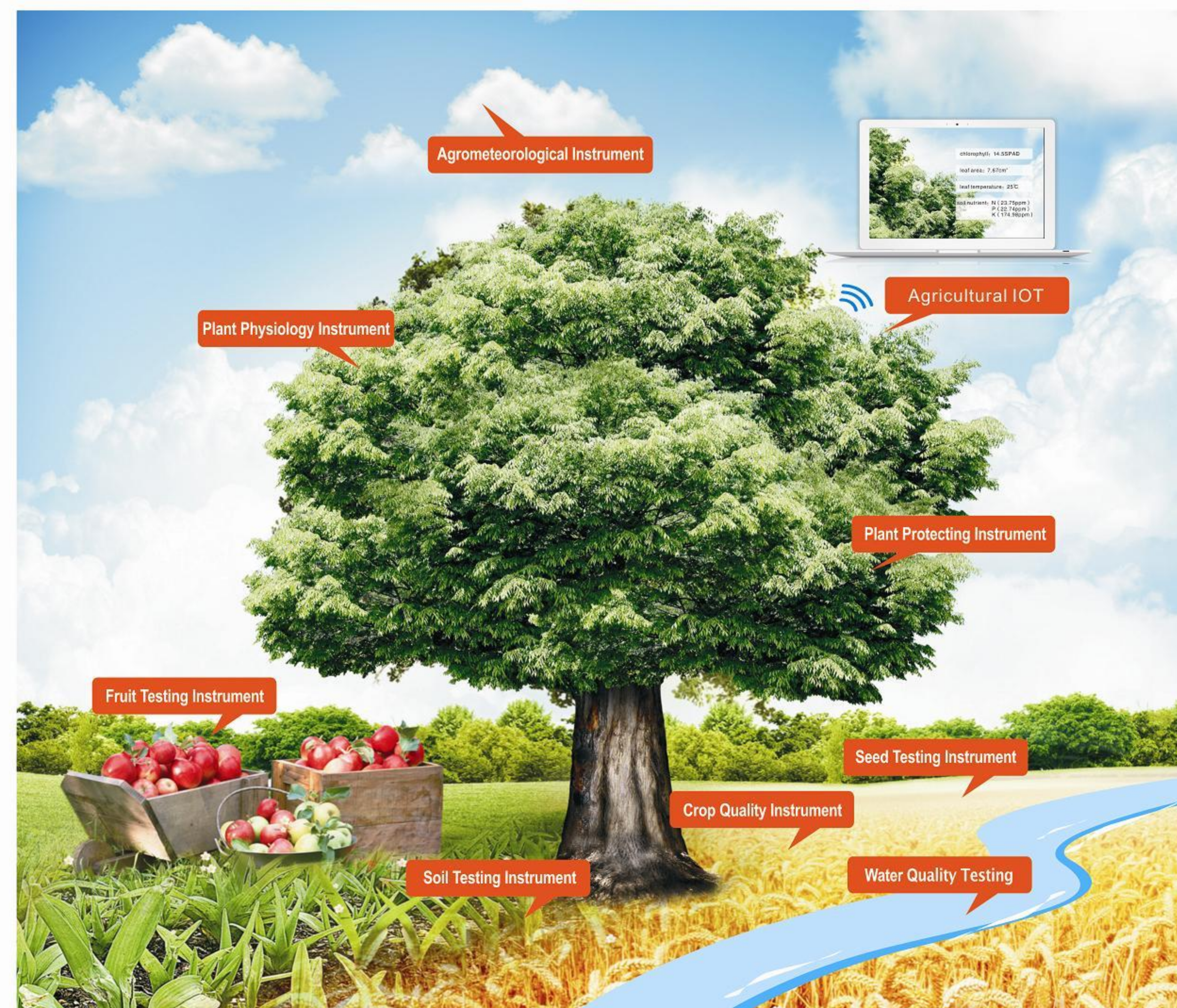
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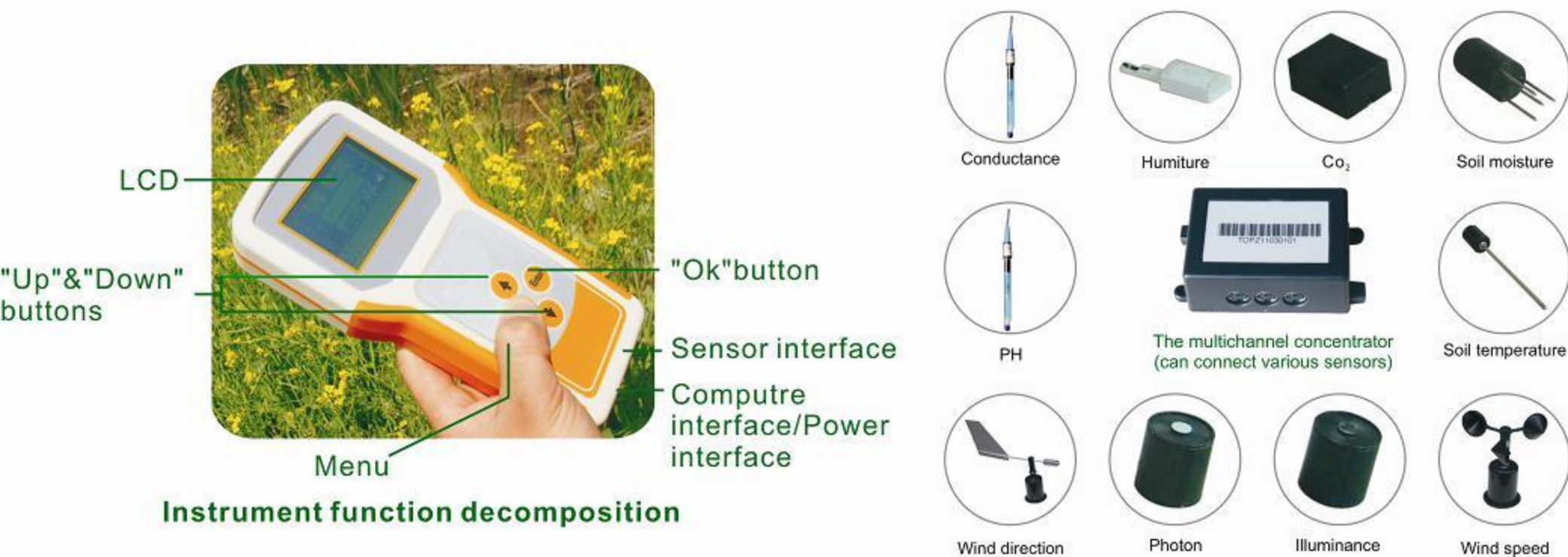
About Us

Zhejiang Top Instrument Co., Ltd is a national high-tech enterprise, which is located on Hangzhou City, Zhejiang Province. And it only takes one hour driving from Shanghai. The company is a comprehensive enterprise for scientific research and development, manufacture, technique service and foreign trade of agriculture and laboratory testing instruments. We are the largest agricultural instrument manufacturer in Asia. After a decade's efforts, the company owns 350 employees, including 80 R&D personnel, 100 production operators, and a professional international trade team. Our products have been exported to more than 150 countries all over the world. We provided the instrument configuration solution to more than 30 countries. As an excellent supplier, we also undertake Government Foreign-Aid Program to other developing Countries. Now we established a professional Instruments construction system of agricultural, meteorology, water conservancy, plant physiology etc. Regarding the agricultural instrument item, it includes Seed, Soil, grain, flour, agricultural meteorology, plant physiology, Plant protection, and Sensors. Meantime, we provide all kinds of solution of Lab Equipments.

Our products all pass the certificate of TSO9001-2008, CE, SGS etc.
Good Quality and Good Service. Warmly welcome to visit our company.

Hand-held Agricultural Weather Monitor

Model: TNH series



Instrument function decomposition

Brief introduction

Hand-held Agricultural Weather Monitor can acquire air temperature, humidity, light intensity, CO₂ concentration, dew point, soil temperature, soil moisture, and other agricultural environmental parameters in real-time. Widely used in facilities agriculture, forestry, horticulture, animal husbandry, and other fields, and fulfill to carry out conduct of automatically monitor, automatic control and intelligent management to the facilities for comprehensive agricultural ecological information.



Characteristic

Handset:

- Small and exquisite, easy to carry and LCD display.
- Both AC and DC are available, convenient for collecting data in field.
- Powerful data conservation function: max 12000groups
- The data is able to be sent into PC through USB interface.
- Power-off memory function: All test data can't be lost when power cut
- Probes are the same and exchange, different sensors can use other sensors' probe. Accuracy not affected.
- 256 channels: it means one host machine is able to connect max 256 sensors.

Software:

- Showing the curve trends of each parameter, Max, Min, and AVG. zoom in and out function.
- Has the coloring function for overrun area, which is visual display.
- Be able to change the conservation date into EXCEL to save a copy.
- Be able to view period of the parameter or graph, and can be printed
- Completely compatible with 32bit system

- Technical parameters:
- Testing time: ≤2s
- Recording capacity: 12000groups
- Recording interval: 1m-99h continuously adjustable
- Communication interface: RS-485, USB
- Power: 5 AA batteries, 9V/2A power adapter

Technical parameter

Testing index	Parameter	Testing index	Parameter
Temperature	range: -40℃-80℃ accuracy: ±0.4℃ resolution: 0.1℃	Rainfall	range: 0-4mm/min accuracy: ±0.4mm resolution: 0.1mm
Humidity	range: 0-100%RH accuracy: ±3%RH resolution: 0.1%RH	CO ₂	range: 0-2000PPM fluctuation: ±(40PPM + measured value × 3%) resolution: 1PPM
Dew Point	range: -40℃-120℃ accuracy: ±0.4℃ resolution: 0.1℃	Soil Temperature	range: -20℃-100℃ accuracy: ±0.5℃ resolution: 0.1℃;
Illuminance	range: 0-200000Lux accuracy: ±20Lux resolution: 1Lux	Soil Moisture	range: 0-100% accuracy: 2% resolution: 0.1%
PAR	range: 0-2,700 μ molm-2s-1 (400-700nm) accuracy: ±1% resolution: 1 μ molm-2s-1	PH	range: pH:0-14 accuracy: ±0.1
Wind Direction	range: 0-359° accuracy: ±1°	Conductance	range: 0-20ms/cm accuracy: ±1%
Wind Speed	range: 0-45m/s accuracy: ± (0.3+0.03V) m/s	Air pressure (optional)	range: 300-1100Hpa accuracy: 1Hpa

Model difference

Model	Testing parameter
TNHY-4	Temperature, humidity, illuminance, CO ₂ concentration.
TNHY-5	temperature, humidity, illuminance, PAR, CO ₂ concentration.
TNHY-6	temperature, humidity, illuminance, CO ₂ concentration, soil temperature, soil moisture.
TNHY-7	temperature, humidity, illuminance, PAR, CO ₂ concentration, soil temperature, soil moisture.
TNHY-9	temperature, humidity, illuminance, PAR, CO ₂ concentration, soil temperature, soil moisture, soil PH, soil EC conductance.
TNHY-10	temperature, humidity, illuminance, PAR, CO ₂ concentration, soil temperature, soil moisture, wind direction, wind speed, rainfall.
TNHY-11	temperature, humidity, illuminance, PAR, CO ₂ concentration, soil temperature, soil moisture, soil moisture, soil PH, soil EC conductance, wind direction, wind speed, rainfall.

Temperature and Humidity Recorder

Model: TPJ-20/TPJ-20-L



Technical parameter

Record capacity: 1-60000 groups
Record time interval: 5s-90hr continuously adjustable
Sensor communication: RS485
Computer communication : USB1.1
Power: 5 AA batteries, 9V/2A power source

Model difference

Model	Function difference
TPJ-20	Test and record humidity and temperature
TPJ-20-L	Test and record humidity, temperature and dew point

Temperature	range: -40℃-80℃ accuracy: ±0.4℃ resolution: 0.1℃
Humidity	range: 0-100%RH accuracy: ±3%RH resolution: 0.1%RH
Dew Point	range: -40℃-120℃ accuracy: ±0.4℃ resolution: 0.1℃

Temperature and Illumination Recorder

Model: TPJ-22

Technical parameter

Record capacity: 1-60000 groups
Record time interval: 5s -90 hr continuously adjustable
Sensor communication: RS485
Computer communication: USB1.1
Power: 5 AA batteries, 9V/2A power source

Temperature	range: -40℃-80℃ accuracy: ±0.4℃ resolution: 0.1℃
Illuminance	range: 0-200000LUX accuracy: ±20LUX resolution: 1LUX



Temperature-Humidity-Illumination Meter

Model: DJL-18



Technical parameter

Record capacity: 1-40000 groups
Record time interval: 5s-90hr continuously adjustable
Sensor communication: RS485
Computer communication: USB1.1
Power: 5 AA batteries, 9V/2A power source

Temperature	range: -40℃-80℃ accuracy: ±0.4℃ resolution: 0.1℃
Humidity	range: 0-100%RH accuracy: ±3%RH resolution: 0.1%RH
Illuminance	range: 0-200000LUX accuracy: ±20LUX resolution: 1LUX

Photon Meter

Model: GLZ-A/ GLZ-B/ GLZ-C



GLZ-A GLZ-B



GLZ-C (double probes)

Technical parameter

Measuring range: 0-2,700 μ molm-2s-1
Linearity: whole measuring length ±1%
Resolution: 1 μ mol m-2 s-1
Record time interval: 5 s -90hr continuously adjustable
Computer communication: USB1.1
Spectral wave range: 400-700 nm
Stability: Change is less than ± 2% / yr
Power: 5 AA batteries, 9V/2A power source
Ultraviolet and infrared response: 0.5%
Sensor communication: RS485
Weight: 140g

Model difference

Model	Function difference
GLZ-A	Without computer interface, can only store datum to the main controller
GLZ-B	Communication interface: RS485 single-channel, with computer interface, can not only store datum to the main controller, but also import datum to the computer for processing
GLZ-C	Communication interface: RS485 double-channel, with computer interface, can record two parameters---PAR and illuminance, can not only store datum to the main controller, but also import datum to the computer for processing

Carbon Dioxide Recorder

Model: TPJ-26/ TPJ-26-I



Technical parameter

Record capacity: 1-120000 groups
Measuring range: 0-2000ppm (TPJ-26),
0-5000ppm (TPJ-26-I)
Record time interval: 5 s -90 hr continuously adjustable
Sensor communication: RS485
Computer communication: USB1.1
Power: 5 AA batteries, 9V/2A power source
Stability: <30ppm/yr
Resolution: 1ppm Accuracy: ±50ppm

Model	Function difference
TPJ-26	max measuring range: 2000PPM
TPJ-26-I	max measuring range: 5000PPM

Soil Temperature Recorder

Model: TPJ-21



Technical parameter

Record capacity: 1-120000 groups
Record time interval: 5s-90hr continuously adjustable
Sensor communication: RS485
Computer communication: USB1.1
Power: 5 AA batteries, 9V/2A power source
Soil temperature range: -20℃-100 ℃
Accuracy: ±0.5 ℃
Resolution: 0.1 ℃

Wind Direction and Speed Recorder

Model: TPJ-30

Technical parameter

Testing items: wind speed and direction
Record capacity: 1-60000 groups
Record time interval: 5s-90hr continuously adjustable
Sensor communication: RS485
Computer communication: USB1.1
Power: 5 AA batteries, 9V/2A power source

Wind Speed	measuring range: 0-45m/s accuracy : $\pm (0.3+0.03V)$ m/s resolution: 0.1m/s start-up wind speed: ≤ 0.5 m/s stability: <0.2 m/s/yr
Wind Direction	measuring range: 0-359° accuracy: $\pm 1^\circ$ resolution: 0.1°



Rain Gauge

Model: TPJ-32



Technical parameter

Recording capacity: 1-120000 groups
Rainfall range: 0-4 mm/min
Rainfall accuracy: ± 0.4 mm
Resolution: 0.1mm
Record time interval: 5s-90hr continuously adjustable
Sensor communication:
Computer communication: USB1.1
Power: 5 AA batteries, 9V/2A power source

Microclimate Information Collecting System

Model: NL-5/NL-5H

Brief introduction

Microclimate information collector (system) can acquire air temperature, humidity, illumination, Wind direction and speed, rainfall, etc. Widely used in facilities agriculture, forestry, horticulture, animal husbandry, and other fields, and fulfill to carry out conduct of automatically monitor, automatic control and intelligent management to the facilities for comprehensive agricultural ecological information.



Characteristic

Handset:

- Stainless steel and waterproof material.
- Both AC and DC are available, convenient for collecting data in field.
- With a internal SD card, can save the data 40millions groups.
- The data is able to be sent into PC through USB interface.
- Power-off memory function: All test data can't be lost when power cut
- Probes are the same and exchange, different sensors can use other sensors' probe. Accuracy not affected.
- Low-power design, the minimum power consumption in the run-time is only 300uA

Software:

- Showing the curve trends of each parameter, Max, Min, and AVG. zoom in and out function.
- Has the coloring function for overrun area, which is visual display.
- Be able to change the conservation date into EXCEL to save a copy.
- Be able to view period of the parameter or graph, and can be printed
- Completely compatible with 32bit system

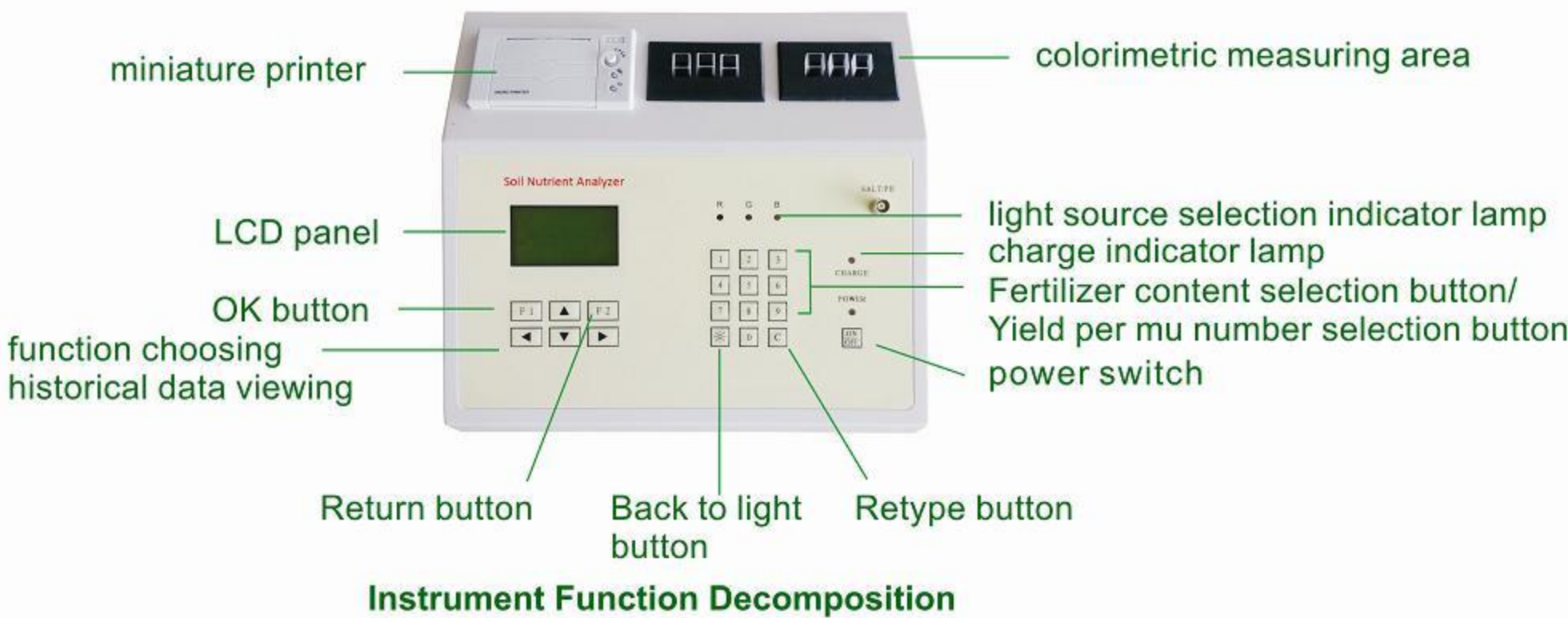
Technical parameter

Temperature range: -40℃-80℃
Temperature accuracy: $\pm 0.4^\circ\text{C}$
Humidity range : 0-100% HR
Humidity accuracy: $\pm 3\%$ HR
Light intensity: 0-200000 LUX
Light accuracy: ± 20 LUX
Wind direction range: 0-359°
Wind speed range: 0-45m/s
Wind speed accuracy: $\pm(0.3+0.03V)$ m/s
Rainfall range: 0-4mm/min
Rainfall accuracy: ± 0.4 mm

Remarks: To add GPS positioning function, please notice before order.

Soil Nutrient Analyzer

Model: TPY series



Brief introduction

Soil Nutrient Analyzer can quickly test the N, P, K, organic matter, salinity and PH in the soil, fertilizer and plants. The machine can store and print data, has complete chemicals which are for free at the first time.

Characteristic

- Quickly test the N, P, K, organic matter, salinity, and PH in the soil, fertilizer and plants.
- With the function of time display, can automatically record and save testing time
- Store about 1000 groups datum (time, place, fertilizers), data can be checked at any time.
- Be able to print the data like test date, sample No, items, sample content, variety and so on.
- Big LCD display, easy to operate.
- When in the test, it has the functions of playback, so it is very convenient and reasonable.
- Armor plate shell, firm, beautiful and durable.
- According to the local situation, you can set the crop variety, productivity, fertilizer variety. And calculate the fertilizing amount automatically.
- Built-in large capacity rechargeable battery.

Technical parameter

- **Nutrient technical parameter:**
Stability: A (absorbency of light) drift < 0.003 in three minutes.
Repeatability: A (absorbency of light) < 0.005
Linearity errors: <3.0 %
Sensitivity: Red light $\geq 4.5 \times 10^{-5}$; Blue light $\geq 3.17 \times 10^{-3}$
Wave length range: Red light $620 \pm 4\text{nm}$; Blue light $440 \pm 4\text{nm}$; Green light $520 \pm 4 \text{ nm}$
Anti-knocking performance: qualified (Attention: above technical parameters all exceed national standards)

- **PH technical parameter:**
Testing range: 1-14
Error: ± 0.1
Moisture unit: $\% (\text{m}^3/\text{m}^3)$;
Accuracy: $\pm 2\%$
moisture content rate testing range: 0-100%
- **Salinity technical parameter:**
Testing range: 0.01% -1.00%;
Relative error: $\pm 5\%$
- **Power:**
AC: 80V- 240V,50Hz
DC: 18V, 5W (built-in)
- **Soil moisture technical parameter:**

Model difference

Model	Function difference
TPY-IV	Test N,P,K, organic matter; with formula function; can provide guidance for fertilizing amount according to needs; without printing function
TPY-6	Test N,P,K, organic matter, soil PH, soil salinity; with storage and printing function
TPY-6A	Based on the function of TYP-6, built-in the amount of nutrients needed for growth of 70 kinds of crops; can provide guidance for fertilizing amount according to needs; with printing function
TPY-6PC	Based on the function of TYP-6, with "intelligent formula fertilization software system"CD; built-in the amount of nutrients needed for growth of 70 kinds of crops; with printing function; can connect with computer for data storage, teletransmission and printing
TPY-7PC	Based on the function of TYP-6, can also test soil moisture; with"intelligent formula fertilization software system"CD; built-in the amount of nutrients needed for growth of 70 kinds of crops; with printing function; can connect with computer for data storage, teletransmission and printing

Soil Acidometer

Model: SDT-60 / SDT-300

Technical parameter

PH range: 3-8 PH PH accuracy: $\pm 0.2\text{PH}$
Moisture range: 1-8% Moisture accuracy: $\pm 1\%$

Model difference

Model	Function difference
SDT-60	Test depth: 6cm, suitable for the surface acidic testing
SDT-300	Test depth: 30cm, suitable for the depth soil acidic testing



Soil Salt Meter

Model: TZS-EC-I

Characteristic

- Smart and portable, easy to operate.
- Automatically temperature compensation
- Can insert into the soil directly and record data automatically
- Store max 12000 groups datum
- Big LCD displayer, easy to read



Technical parameter

Measuring range: 0.00-19.99 ms/cm
Measuring accuracy: EC $\pm 2\%$ full scale
Temperature range: -5-50°C
Temperature accuracy: $\pm 0.5^\circ\text{C}$
Temperature compensation: 0-50°C
Resolution: 0.01ms/cm
Working temperature: 0-50°C
Power: 5 AA batteries, power source adapter

Soil Moisture Meter (with GPS function)

Model: TZS-II / TZS-IIW



Characteristic

- LCD display, light-touch button, display moisture content and temperature, group count.
4 AA batteries, with low voltage warning function.
- Special-purpose aluminum alloy suitcase, light weight, convenience for the field work.
- Data can be downloaded and stored, the storage document can be export into EXCEL sheet directly

Technical parameter

Soil temperature technical parameter:

Temperature unit: $^\circ\text{C}$
Measuring range: -20-100°C
Accuracy: $\pm 0.5^\circ\text{C}$
Standard cable length: 1.5m (made according to customer needs, up to 1000m)
Optional components: recommend to use earth probe when measuring the underground deep soil moisture.

Soil moisture technical parameter:

Moisture unit: % (m^3/m^3)
Response time range: 0-100%
Moisture measuring: $\leq 2\text{s}$
Relative error: $\leq 3\%$
Soil moisture probe working temperature: : -40°C—80°C
Standard cable length: 1.5m (made according to customer needs, up to 1000m)
Net weight: 1kg

Model difference

Model	Function difference
TZS-II	With GPS positioning function; can test and display soil moisture content; can also test the accurate information (longitude, latitude) of the test site; with USB1.1 communication interface and specialized data download software; software has storage and printing functions; can connect with computer and import the datum to computer
TZS-IIW	Besides having all functions of TZS- II, it has the additional function of testing temperature.

Soil Tensionmeter

Mode:TEN series

Brief introduction

The soil tension meter can help you to forecast irrigation volume and irrigated time. Use water in the most effective way. It can test soil humidity and easy to operate. The soil tension meter is made of three parts: pressure gauge, acrylic tube and ceramic probe.

Technical parameter

Available length and model:

Testing range: 1 Bar (1 Bar = 100kpa)
Length can be made according to the customer demand. (standard length is the length of transparent polycarbonate tube in the middle of tensionmeter tube)
Ten-15 (15cm) Ten-45 (45cm) Ten-60 (60cm) Ten-100 (100cm)
Ten-30 (30cm) Ten-50 (50cm) Ten-90 (90cm) Ten-120 (120cm)
Testing range: 1 Bar (1 Bar = 100 Kpa)



Soil Moisture Meter

Model: TZS-I / TZS / TZS-IW / TZS-W



Characteristic

- LCD display, smart and portable, light-touching key, easy to control.
- Connect to PC, it will show curve chart of the parameters.
- Both auto and manual type are available.
- Both AC and DC are available.
- Max storage data: 12000 groups. Be able to check data both on the host and computer.
- Power-off memory function: All test data can't be lost when power cut
- Strong data processing function of software (count, analyze, display, inquiry).

- Probes have the uniformity, different parameter probe can be connected to others sensors.
- 64 channels, synchronous testing function, probes are unlimited in the range of capacity.

Technical parameter

Handset:
Record capacity: 12000 groups
Record time interval: 1m - 99h continuously adjustable.
Communication interface: RS-485, USB
Power: 5 AA batteries, 9V/2A power adapter

Sensor technical parameter:
Soil moisture technical parameter:
Moisture unit: % (m^3/m^3)
Moisture measuring range: 0 ~ 100%
response time: $\leq 2s$
Relative error: $\leq 3\%$
Soil moisture probe working temperature: $-40^{\circ}C-80^{\circ}C$
Standard cable length: 1.5m (made according to customer needs, up to 1000m)
Net weight: 1kg

Soil temperature technical parameter:
Temperature unit: $^{\circ}C$
Measuring range: $-20-100^{\circ}C$
Accuracy: $\pm 0.5^{\circ}C$
Standard cable length: 1.5m(made according to customer needs, up to 1000m)
Optional components: recommend to use earth probe when measuring the underground deep soil moisture



Model difference

Model	Function difference
TZS-I	Directly test and display soil moisture content; with data storage function(120000 groups); can be directly stored to the main machine.
TZS	With USB1.1 communication interface, can connect with computer; with specialized data download software(for free); software has storage and printing function; can directly test soil moisturecontent; data can be stored to the machine and imported to computers.

To meet customers' needs, our company adds temperature testing function to the original products, other functions are the same.

Model	Function difference
TZS-IW	Directly test and display soil moisture content and temperature; with data storage function(120000 groups); can be directly stored to the main machine.
TZS-W	With USB1.1 communication interface, can connect with computer; with specialized data download software(for free); software has storage and printing function; can not only test soil moisture content and temperature, but also sampling time; data can be stored to the machine and imported to computers.

Digital Soil Water Potential Meter

Model: TRS-I / TRS-II

Characteristic

- High accuracy and high resolution. It is able to test soil temperature and water potential at the same time.
- Easy to operate, portable, flexible, can purchase one set, together with multi-probes.
- Automatically get the peak data of water potential, 200groups data can be stored.
- Time, peak data, automatic record function.
- With time setting, full scale setting, auto-save functions.
- Record temperature, water potential, time and stored No at the same time.
- Auto power-off when low voltage.



Technical parameter

Max load: 100Kpa
Resolution: 0.01Kpa
Accuracy: ± 1
Soil temperature measuring range: $-55-+150^{\circ}C$
Temperature accuracy: ± 0.5
Probe quantity: 3

Model difference

Model	Function difference
TRS-I	Can only test one index: soil water potential
TRS- II	Can test both soil water potential index and soil temperature index

Soil Compaction Meter

Model: TJSD-750-III /TJSD-750-IV

Technical parameter

Measuring depth: 0-375mm
Max load: 10000Kpa
Resolution: 0.1Kpa
Accuracy: $\pm 1\%$
Working temperature: -10°C - 60°C
Output interface: RS232
Power: charging battery,
charger(charge voltage: 100V-240V)
Shape dimension:
140(outside diameter)*750(height)



Model difference

Model	Function difference
TJSD-750-III	Can directly test soil compaction (kg and kpa), and can store each sampling data to the main machine, can reflect parameters of soil compaction , built-in GPS positioning and depth measurement system, can simultaneously display soil compaction, measuring depth and geographical location (latitude and longitude).
TJSD-750-IV	With TJSD-750-III full function, can connect with computer, automatically generate the soil compaction curve of each measurement site, and can generate regional maps of soil compaction by a number of measurement site, automatically generate the data chain.

Soil Hardness Tester

Model: TYD-1



Product description

Soil Hardness Meter adopts theoretical value pressure gauge Kg/Cm2 to directly measure the soil hardness.It is very convenient and accurate to use this instrument for soil permeability, aeration and soil properties survey research.

Measuring method:

- Level the measuring soil surface. Then insert the pinpoint of the meter into the soil until (opening) part.
 - Pull out the soil hardness meter vertically, read the indicating value.
 - After finished reading measured value, drive rotary-knob, make the indicating meter to zero.
 - If there is soil on the probe, please clockwise rotate (opening) part, then take down the round sleeve, rotate to the fixed position, and clean up the probe.
 - Otherwise, the measuring value will be not accuracy.
- Hardness indication range: 0-40mm; 0-500kg/cm²

Soil Hardness Tester

Model: TYD-2

Characteristic

- High accuracy and high resolution: large screen LCD display, with backlight function (backlight for night use), inverted reverse function of numbers on the screen.
- Battery capacity display: divide into 3, 2 and 1 grids. If battery capacity is too low , the instrument will shut down.
- Gravity acceleration setting function: users can input the exact value of gravity acceleration of testing site to make the test more precise.
- Peak value maintaining function: maintain the peak value display until zero adjustment manually.
- Automatic peak function: Maintain displaying the peak values for 2 s before automatic elimination.
- Large memory storage function: can store 896 measuring values. Data output function:data can be imported to the computer for various analysis .
- Auto-off time setting: 10min-90 min automatic shutdown can be set. High quality charging power: 100-240V of charging voltage can be available.



Technical parameter

Max load: 100Kg (Kg and N can be switched automatically)
Resolution: 0.01Kg
Accuracy: $\pm 0.5\%$
Measuring depth:0~450mm
Power: charging power supply:220V/AC,
continuous operating time of battery:6~8 hr
Stability: temperature drift :0.2uV/ $^{\circ}\text{C}$ (0-60 $^{\circ}\text{C}$)
zero drift: $\leq 0.1\%/8$ hr /FS

Calibration range: full-scale calibration
Environmental temperature:0~+60 $^{\circ}\text{C}$
Environmental humidity: $\leq 80\%$
Allowable overload:150%
Power supply mode:5 nickel cyanogen
battery /220V AC charge 4~6h

Soil Compaction Meter

Model: TJSD-750/TJSD-750-II



Technical parameter

Measuring depth: 0-450mm
Measuring range: 0-100kg; 0-7000kpa(0-1000psi)
Measuring accuracy: 0.05kg
Unit: 5k(based on intensity of pressure unit)
Storage amount: 1000 groups
Working temperature: -10℃-60℃
Power : 4 AA batteries

Characteristics

- Compacted soil can stop the water from penetrating, reduce the Utilization rate of fertilizer, influence the growth of plants, and then reduce the production.
- So it is very important to know the compaction of soil. This meter is used for giving a good direct to agricultural industry and road construction.

Model difference

Modes	Function difference
TJSD-750	General type, display soil compaction directly, with data storage function
TJSD-750-II	Can not only test soil compaction, but also save sampling data, RS232 connection which can connect with computer, with storage, printing function, with GPS positioning system, can show the longitude and latitude of the testing area.

Soil Sampler Device

1m

Characteristics

- Stainless steel, no pollution to soil and reduce the labor intensity
- Spiral bottom, and it can be detachable to use as extension rod for
- Soil Moisture meter.
- Pointed bottom, labor- saving.
- One scale for each 10m, the diameter of bottom is 6cm.
- Total length: 1m



Soil Sampler Kits

Model: TPLQ-1-1 / TPLQ-1-1.5 / TPLQ-1-2



Model difference

Model	Difference
TPLQ-1-1	Soil depth: 1m
TPLQ-1-1.5	Soil depth: 1.5m
TPLQ-1-2	Soil depth: 2m

Portable Area Meter

Model: TMJ- I

Brief introduction

Portable Area Meter can test regular & irregular area such as farmland, green land, forest, water area, tidelands and so on. When testing regular area, you can test the area by several points; while testing the irregular area, you can walk follow the area border, the instrument will automatically count. It can also test distance and perimeter.

Technical parameter

Measuring range: 500-9999999 square meter
Measuring distance range: 0-999999.9
Measuring distance accuracy: 2m
Measuring unit: m
Storage amount: 2000 groups
Battery: 4 AA batteries
Size: 156*80*25mm



Plant Nutrient Analyzer

Model: TYS-3N

Product description

Plant Nutrient Analyzer can save three parameters (chlorophyll, nitrogen and leaf temperature) at the same time. Plant chlorophyll, nitrogen content and leaf temperature are important nutrient. They're important basis for plant fertilization and irrigation. Test leaf chlorophyll, nitrogen and leaf temperature by near-infrared spectrum nondestructive testing. Can nondestructively test three plant nutrient and growth physiology information.



Characteristic

- Backlight function.
- Rapid determination: test plant chlorophyll, nitrogen and leaf temperature at the same time.
- Test point location information: Receive by inner GPS module, NAME-83 license agreement and Serial Port Break. The received data decode to longitude, latitude, speed, time, (clock and calendar, year, month, day, hour, minute and second) and so on, and store these information. Time can be set manually.
- Have Automatic and Manual measurement patterns.
- Can connect with PC. Then export the data to manage and analysis plant nutrient value

Technical parameter

Measuring index: nitrogen, chlorophyll and leaf temperature
Nitrogen range: full scale
Nitrogen accuracy: $\pm 5\%$
Chlorophyll range: 0.0-99.9 SPAD
Chlorophyll accuracy: ± 2 SPAD
Leaf temperature range: 0-90 $^{\circ}\text{C}$
Leaf temperature accuracy: $\pm 0.5^{\circ}\text{C}$
Storage capacity: 999 groups

Chlorophyll Meter

Model: TYS-A

Product description

Chlorophyll Meter can measure chlorophyll content of plants. Chlorophyll content and leaf nitrogen content have a very close relationship. Thus, chlorophyll content can reflect plants demand for nitro. Using the instrument can do go to put nitrogen fertilizer reasonably, improve utilization of nitrogen and protect environment.



Technical parameter

Measuring area: $\Phi 10\text{mm}$
Measuring mode: 2 wavelength concentration difference
Sensor: silicon semiconductor photodiode
Display mode: measuring value: 3 digits LCD display
measuring times: 2 digits LCD display
Min measuring interval: $< 2\text{s}$
Measuring range: 0.0-99.9 SPAD
Accuracy: ± 1.0 SPAD
Repeatability: ± 0.3 SPAD
Operating temperature: 0-50 $^{\circ}\text{C}$
Storage temperature: -20-55 $^{\circ}\text{C}$
Power: 2 AA batteries
Dimension : 155mm x70mm x42mm
Battery life: Each of two batteries can be maintained more than 20,000 operations
Weight: 320 g (excluding batteries)

Plant Photosynthesis Meter

Model: 3051C

Characteristic

- Use laptop to connect with CO₂ Meter and leaf chamber, receiving the data from sensors.
- Can test photosynthetic rate, steaming rate, stomatal conductance, and CO₂ density of plants.
- Software will show the data by curves, easy to operate.
- Both AC and DC available.
- Light weight, small volume, portable.



Components

main controller, handle, leaf chamber, gas tank

Technical parameter

Measuring parameter	Resolution	Measuring range	Accuracy
CO ₂	1ppm	0-1000ppm	$\pm 1\%$
Relative humidity	0.1%	0-100%	2%
Temperature	0.1 $^{\circ}\text{C}$	0-50 $^{\circ}\text{C}$	0.2 $^{\circ}\text{C}$
Illumination	1 μE	0-3000 μE	± 10 μE

Plant Respiration Meter

Model: 3051A

Characteristic

- Plant Respiration Meter is used for measuring the respiratory rate of plants.
- It can measure accurately the carbon dioxide which are produced or released during plants respiration. It mainly applies to teaching and simple experiment.



Components

Main controller, handle and leaf chamber

Technical parameter

Measuring range: 1-1000-2000ppm
Resolution: 1ppm
Accuracy: 1%F.S
Zero drift: $\leq \pm 3\%$ F.S/ 4h
Span drift: $\leq \pm 3\%$ F.S/ 4h
Linearity: $\leq \pm 2\%$ F.S
Repeatability: $\leq \pm 1\%$

Plant Respiration Meter

Model: 3051D



Characteristic

- Small and portable, it is convenient for user to measure at anytime and anywhere.
- Dot matrix LCD. Language in English.
- Time, date, leaf area, volume, measure interval time, username can be set and modify.
- Instant display the measuring process and results, data can be stored as well.
- Export data in main machine to PC for second analysis. Data can be printed as well.
- Display automatically CO2 concentration, relative humidity, PAR, air & leaf temperature.
- Different kinds of leaf chambers (reactor), it is suitable for leaves, seeds, insect and so on.

Product description

This instrument applies to the scientific experiment of agroforestry gardening, and microorganism, insect and so on. It is used for testing CO2 concentration, leaf blade temperature, PAR, and leaf chamber temp & humidity. Through the scientific analysis to get Photosynthesis indicators such as: leaf's photosynthesis rate, leaf's Transpiration rate, intercellular CO2 concentration, stomatal conductance, water use efficiency.

Technical parameter

CO2: Non dispersive infrared CO2 analysis
Measuring range: 0-1000ppm/ 0-1500ppm/ 0-2000ppm
Resolution: 0.1ppm Accuracy: 0.1ppm
Leaf chamber temperature: (high accuracy digital temperature sensors imported from Switzerland)
Measuring range: 0-50°C
Resolution: 0.1°C
Error: $\pm 0.2^\circ\text{C}$
Leaf blade temperature: (RTD)
Measuring range: 0-50°C
Resolution: 0.1°C
Error: $\pm 0.2^\circ\text{C}$
Leaf blade humidity: (high accuracy digital humidity sensors imported from Switzerland)
Measuring range: 0-100%
Resolution: 0.1%
Error: $\leq \pm 3\%$
PAR: (silicon photocell with Correction filter)
Measuring range: 0-2500 $\mu\text{mol}/\text{m}^2\cdot\text{s}$
Accuracy: $< 5 \mu\text{mol}/\text{m}^2\cdot\text{s}$
Leaf chamber size: 55*20mm (standard).
Other size can be customized
I: 25*25mm II: 55*20mm III: 65*10mm

Main machine

Working temperature: 0-50°C
Relative humidity: 0-100%
Power: DC8.4V lithium battery. 7-9hours
Data storage: 2GB SD card, 0.5million groups can be stored.
Size: 260*260*130mm weight: 3.25kgs
Optional accessories:
Leaf chamber: different size, respirator, chamber
Power: red/ blue LED light, adjustable range: 0-2000 $\mu\text{mol}/\text{m}^2\cdot\text{s}$

Portable Leaf Area Meter

Model: YMJ-A/YMJ-B

Product description

- Measuring the leaf area without damage
Portable and easy to operate.
- Is able to measure leaf area, average area, length, width and thickness of leaf, perimeter and ratio of length and width
- With micro computer technology, LCD display

Technical parameter

Test unit: mm, mm²
Accuracy: +2%
Length: ≤1000mm
Width: ≤160mm
Thickness: ≤8mm
Stored datum: 200groups
Battery: 6v

Model difference

Model	Function difference
YMJ-A	Without computer interface, only can save and check data on the main machine.
YMJ-B	RS-232 link with computer by software, you can put datum into computer, can convert to excel format and print.



Portable Plant Culm-strength Meter

Model: YYD-IA/YYD-IB

Characteristic

- High accuracy and resolution, easy to operate, portable.
- Auto save measured pressure, time and storage sequence number.
- Testing units can be selectable and transformed.
- Auto power off.
- With backlight function.



Two different fixtures for measuring the strength of different crops

Technical parameter

Model	YYD-IA	YYD-IB
Max load	50N	500N
Resolution	0.01N	0.1N
Culm width range	0 ~ 100mm	
Accuracy	±0.5%	
Unit	N, KG	
Output Interface	RS232	
Power	Charging battery, charger (charging voltage:100V-240V)	
Shape size	295mm × 130mm × 36mm	
Net weight	600g	

Plant Culm-strength Meter

Model: YYD-I

Product description

The stem intensity of sorghum, maize, and tobacco is a major factor to decide its lodging-resistant ability. Since a long time, the lodging of sorghum, maize, tobacco etc. bring us great difficulties in crops mechanized harvesting. Lots of crops are wasted. In addition, corn lodging lead to inadequate illumination, then makes its production drawdown. To cultivate high intensity stem of crop seed, this instrument applies to agricultural genetic breeding and crops quality's research.

Technical parameter

Stem bending performance measuring area: 0.5cm²
Stem compressive strength measuring area: 1cm²
Stem structure intensity measurement: 1mm²
Max load: 500N(N, kg, ib can be transformed automatically)
Resolution: 0.01N
Accuracy: ±0.5%
Charging Power: 220V/AC
Battery working time: 6-8 hours
Stability: temperature drift: 0.2uV/°C(0-60°C); zero drift: ≤0.1%/8 hr/FS
Calibration range: full-scale calibration
Working temperature: 0-60°C



Working humidity: ≤80%
Allowed overload: 150%
Off-time setting: 10-90 min
Power: AA nickel cyanide battery groups
220V/AC charging for 4-6hr

Frequency Oscillation Pest-Killing Lamp

Model: TPSC1 & TPSC2

Product description

Insecticidal lamp with solar energy frequent vibration will transform optical energy into electrical energy through solar panel, output safe voltage, save energy and electricity and cost little, which provides advanced and protested tool for pest control areas where lack of electrical energy so that they have to give up trapping pests.



Characteristic

- Frequent vibrated induced control technology
- Light source: frequent vibration tube (wavelength: 320~600μm)
- Impact area: ≥0.16m2
- Protect for network flow short circuit
- Make the cross network spiral winded to avoid short circuit; the distance between networks is alternative. (Generally ≤ 10mm)
- Light control: auto-shut up and down according to day and night
- Auto-protection in rainy days: when humidity above 95% RH, the frequent vibration lamp will be in the state of auto-protection, or it will work normally. (TPSC-2)
- Insulation column: high-temperature: 1000℃ ; corrosion resisting and high pressure resisting; in rainy days, pull arc in high pressure network 30min continuously; the insulation column no carbonization.
- Control area: 30~60 mu

Technical parameter

Power: AC185-265V, 50HZ
Network voltage: 2-3KV
Insulation resistance: ≥2.5M
Rate: ≤25W
Life span: 3~5 years
Light source: 15 W wavelength trapped tube;
Electronic ballast can be started instantly.

Model difference

Model	Function difference
TPSC1-1	Light control
TPSC1-2	Light and rain control
TPSC2-1	Storage battery power supply, light control
TPSC2-2	Storage battery power supply, light control and rain control

Hand-held Refractometer

Model: WZ series

Product description

- Widely used in agriculture, farming, brewing, food, drink processing industries.
- High accuracy, easy to operate.
- Portable, small volume, light weight, beautiful appearance.
- With automatic temperature compensation function.



Model difference

Name	Model	Measuring Range	Resolution
Hand-held Refractometer	WZ101	0~10%	0.10%
	WZ102	0~20%	0.10%
	WZ103	0~32%	0.20%
	WZ104	28~62%	0.20%
	WZ105	45~82%	0.50%
	WZ108	0~80%	0.50%
	WZ109	58~92%	0.50%

Digital Refractometer

Model: TD series



Technical parameter

Automatic temperature compensation range: 0℃~40℃
Temperature range: 0℃ (32°F) - 40℃ (104°F)
Storage temperature: -10℃ (14°F) - 50℃ (122°F)
Temperature accuracy: ± 0.1℃
Using humidity: < 90%.
Using altitude: < 2000 m
Battery: AAA
Battery life: more than 8000 times
Net weight: 130G
Dimension: 118×62×32mm

Model	Range	Measuring range	minimum	Precision
TD-45	BRIX	0~65%	0.1%	±0.2%
	REFRACTIVE INDEX	1.3330~1.4535	0.0001	±0.0003

Digital Fruit Sclerometer

Model: GY-4

Product description

- Storage function. Be able to store 896 values.
- Data output function.
- Peak automatic discharge function, and maintain peak 2 seconds display then discharged automatically
- Green environmental: auto off for 10 minutes
- High-quality Charging power supply.
- 6 digits large screen display.

Technical parameter

Range	0.2~15kg/cm ₂ (× 10 ⁵ pa)		0.4~30kg/cm ₂ (× 10 ⁵ pa)	
Division value	0.01 kg/cm ²		0.01 Kg/cm ²	
Pressure head diameter	1#	Φ 11.1mm	2#	Φ 7.9mm
Accuracy	±1%			
Display mode	digital			
Net weight	about 0.6kg			
Insertion depth of pressure head	10mm			
Indication error	±0.5%			
Unit	Kg/cm2 (×105 Pa)			
Output interface	RS 232 nine-hole socket.			
Sensor structure	S-type high-precision sensors (inside)			
Working temperature	5℃-35℃			
Transport Temperature	-10℃-60℃			
Humidity	15%-80 %RH			
Working environment	No Vibroseis and corrosive medium around			
Net Weight	450g			
Size	230×66×36 (mm)			



Fruit Sclerometer

Model: GY-1/GY-2/GY-3

Product description

Fruit Sclerometer (Fruit Hardness Tester), this series includes GY-1, GY-2 and GY-3 three models, used to judge fruits' maturity by testing hardness of fruit such as apple, pear, watermelon, banana and so on. It's portable, small on volume and light on weight, displays visualized values. It can be used in fruit tree scientific research department, fruit company, fruit tree farm, colleges and universities, etc.



GY-1
GY-2

GY-3

Model difference

Model	GY-1	GY-2	GY- 3	
Scale value	2-15kg/cm ² (× 10 ⁵ pa)	0.5-4kg/cm ² (× 10 ⁵ pa)	1-24kg/cm ² (× 10 ⁵ pa)	0.5-12kg/cm ² (× 10 ⁵ pa)
Pressure head size	Φ 3.5mm	Φ 3.5mm	Φ 8mm	Φ 11mm
Accuracy	±0.1	±0.02	±0.1	
Insertion depth of pressure head	10mm			
Size	140 × 60 × 30mm			

Automatic Kjeldahl Distillation System

Model: ZDDN-II

Characteristic

- Adopt microcomputer controlling process, include manual mode and automatic mode, can be set and switched according to user needs.
- Large array LCD display, touch key, easy to operate.
- Automatically control distill, add water, control water level and cut off water supply.
- Various security protection: digestive system security device, steam generator water shortage alarm, water level detection fault alarm.
- Stored operation procedure quantity: 250.
- Instrument shell adopts specially made plastic spray steel; Working area adopts ABS anticorrosive board. Avoid chemical reagent corrosion and mechanical surface damage, acidproof and alkaliproof.
- Once detected fault, controlling system will power off automatically.



Distiller (ZDDN-II)(digestive fumace is not included in standard configuration)

Technical parameter

Measuring varieties: grain, feed, food, dairy products, drink, animal food, soil, medicine, settling, chemical and so on
Number of testing sample: solid <5 pieces , liquid < 15ml
Measurement Range: 0.1mgN-200mgN (0.02%-95%)
Operation Mode: automatic
Water-in Mode: tap water and distilled water
Recycle Rate: $\geq 99\%$ (relative error, including digest process)
Repetition rate: relative standard error $< \pm 1\%$
Distilled speed: 5-15min/sample (according to sample amount)process)
Time for cooling water: 3L/Min
Power adapter: AC220V / 50HZ
Power: 1000W
Water supply: water pressure>1.5MPa; water temperature<20℃
Dimensions: 430*360*670mm
Weight: 25kg

Semi-automatic Kjeldahl Distillation System

Model: KDN

Characteristic

- Auto microcomputer controlling process
- Automatically control distill, self-adding and self-stopping water, control waterline
- Various safety devices: digestive tube safety door, steam generator water shortage alarm, waterline detection fault alarm
- The outer plate adopts special plastic spray steel; working area adopts ABS anticorrosive board to prevent chemical reagent corrosion and mechanical surface from damage. Acidproof and alkaliproof.
- Standard configuration is not including digestion furnace.



Distiller(KDN series)

Technical parameter

Measuring varieties: grain, food, dairy products, drink, animal food, soil, medicine, settling, chemical and so on.
Sample quantity: solid: 0.20g-2.00g, semisolid: 2.00g-5.00g, liquid: 10.00ml-25.00ml
Measurement Range: 0.1mgN-200mgN (mg nitrogen)
Operation Mode: semi automatic
Water Inlet Mode: tap water and distilled water
Recycle Rate: $\geq 99\%$ (relative error, including digest process)
Repeat Rate: relative standard error $< \pm 1\%$
Distilled speed: 5-15min/sample (according to sample amount)
Time for cooling water: 3L/Min
Power adapter: AC220V / 50HZ
Power: 1000W
Water supply: water pressure>1.5MPa; water temperature<20℃
Dimensions: 380*320*670mm
Weight: 20kg

Raw Fiber Analyzer

Model: CXC-06



Product description

Raw Fiber Analyzer tests raw fiber content according to acid and alkali boiling method. It adopts accurate concentration acid and alkali to boil samples in particular condition, then remove soluble substances by ether, deduct the amount of minerals by high temperature burning.

Technical parameter

Measuring object: raw fiber content in various kinds of grain, feed, food and other agricultural and sideline products
Measuring sample quantity: 6/times
Repeatability error:
raw fiber level < 10%, absolute value error ≤ 0.4%
raw fiber level > 10%, absolute value error ≤ 4%
Measuring time:
about 100 min (including acid 40 min, alkali 40 min, filter and wash 20 min)

Power : AC220V/50Hz, 2800W
Water supply: water pressure > 1.5MPa,
water temperature < 20℃
Size: 670×450×670mm
Weight: 30kg

NMR Oil Content Analyzer

Model: HCY-10/HCY-20

Product description

NMR Oil Content Analyzer is specially used for testing oil content in oil crops.

Characteristic

High efficiency. Sample can be tested within 30s.
Safe, nondestructive, no pollution, low carbon, environmentally friendly.
Expenses saving. Can save lots of water, electricity, ether, labor, extraction equipment expenses.
High accuracy and good stability.



HCY-10



HCY-20

Model difference

Model	HCY-10	HCY-20
Testing variety	Test oil content in bean, rapeseed, sesame, corn, cottonseed, sunflower seed, peanut seed, wheat, bancoul nut, volatile matter and so on.	
Feature	Digital pipe display, operating with keys, manually adjust frequency	Color LCD screen, mouse + keyboard, computer type operating, software automatically adjusts frequency.
Technical parameter	Sample volume: 40ml Sample oil content range: 0.1%-100% Accuracy: +0.3% Stability: +0.3% Power: 220V, 50Hz Power consumption: ≤50W	Sample volume: 40ml Sample oil content range: 0.1%-100% Accuracy: +0.2% Stability: +0.1% Power: 220V, 50Hz Power consumption: ≤40W

Grain Hardness Meter

Model: GWJ-1 / GWJ-2 / GWJ-3

Product description

GWJ series Grain Hardness Meter measures hardness of granular good such as rice, wheat, etc.

Characteristic

- Easy to operate, direct reading, high accuracy, elegant appearance.
- Pressure head is made of stainless steel, which increases the service life.
- Has two types: Pointer and Digital LED.

Technical parameter

Model	GWJ-1	GWJ-2	GWJ-3
Measuring range	20kg	20kg	30kg
Display mode	Pointer	Digital LED	Digital LED
Stress mode	Manual	Manual	Automatic
Max diameter	18mm	18mm	20mm
Accuracy	± 2%	± 0.5%	± 0.5%
Resolution	0.1kg	0.1kg	0.1kg



GWJ-1
Pointer type



GWJ-2 GWJ-3
Digital type

Intelligent Illuminance Incubator

Model: GTOP-B/D series



Product description

GTOP Intelligent Illumination Incubator is a biological incubation experimentation instrument, which takes advantage of illumination plus automatically day and night shifting program, to keep a constant temperature. The instrument could be used in various areas such as seed germinate, seeding breeding, plant group foster and planting, animalcule incubation, breeding of insects and small animals, anti-oxidation experiment of medicines and environmental experiments of articles.

Characteristic

- Aluminum alloy frame, delicate appearance, user-friendly.
- Automatic microcomputer control, touch key.
- Can set time, temperature, illuminance.
- Can display experiment cycle, set time, set temperature, remaining time, actual temperature and illuminance level. With periodic transformation function.
- Has overheating and sensor abnormal protection function, ensure the instrument and sample secure.
- Full spectrum plant growth lamp, helpful for plants growth and improve the disease resistance.
- Power-off memory function; power failure time automatic compensation function; can continue the original working status after repower-on.

Technical parameter

Temperature range: 0-50℃
Temperature fluctuation: ±0.5
Temperature uniformity: ±1℃
Temperature, humidity, light can be programmed to periods:
Type B can be divided into day (period 01) and night (period 02)
Type D can be divides into 1-30 periods (include all functions of type B)
Illuminance: 0~5500LX
(Type 1: 0-12000LUX)
(Type 2:0- 22000LUX)
Can increase the light intensity according to customer requirements

Heating power: 300W (GTOP-1000: 700W)
Compressor power: 190W-320W
Compressor delay guard time: about 3min
Noise: <70dB
Working mode: continuous operation (compressor intermittent working)
Working environment: Temperature: 0-38℃ (non-corrosive gas)
Power: 220±22V, 50±0.5HZ
Tank material: stainless steel

Model difference

Model	Volume	Boundary dimension	Period control mode	Illuminance (LUX)
GTOP-150B GTOP-150D	150L	520×550×1600mm	day period and night period, automatic;1-30 periods, automatic	0-3000-5500 can choose 3000LUX for seed germinating; can choose 5500LUX for seedling germinating. Illuminance of incubators can be increased by user requirement.
GTOP-260B GTOP-260D	270 L	590×590×1655mm		
GTOP-268B GTOP-268D	268 L	590×590×1655mm		
GTOP-280B GTOP-280D	280 L	590×590×1695 mm		
GTOP-300B GTOP-300D	300 L	590×590×1785 mm		
GTOP-310B GTOP-310D	310 L	590×590×1785 mm		
GTOP-380B GTOP-380D	380 L	660×660×1770 mm		
GTOP-430B GTOP-430D	430 L	660×660×1890 mm		
GTOP-500B GTOP-500D	500	692×692×2000 mm		
GTOP-1000B GTOP-1000D	1000 L	1260×660×1985 mm		

Intelligent Artificial Climate Incubator

Model: RTOP-B/D series



Product description

RTOP Artificial Climate Chamber is a biological incubation experimentation instrument which takes advantage of illumination plus automatically day and night shifting program to keep a constant temperature. The instrument could be used in various areas such as seed germinate, seeding breeding, plant group foster and planting, animalcule incubation, breeding of insects and small animals, anti-oxidation experiment of medicines and environmental experiments of articles.

Characteristic

- Aluminum alloy frame, delicate appearance, user-friendly.
- Automatic microcomputer control, touch key.
- Can set time, temperature, illuminance.
- Can display experiment cycle, set time, set temperature, remaining time, actual temperature and illuminance level. With periodic transformation function.
- Has overheating and sensor abnormal protection function, ensure the instrument and sample secure.
- Full spectrum plant growth lamp, helpful for plants growth and improve the disease resistance.
- Power-off memory function; power failure time automatic compensation function; can continue the original working status after repower-on.

Technical parameter

Temperature range: 0-50℃
Temperature fluctuation: ±0.5
Temperature uniformity: ±1℃
Humidity range: 50-95%
Humidity fluctuation: ±5%RH
Deviation: ±5%RH
Temperature, humidity, light can be programmed to periods:
Type B can be divided into day (period 01) and night (period 02)
Type D can be divides into 1-30 periods (include all functions of type B)
Light grade: 0-3 grade (strong light: 0-8 grade)

Light intensity: 0-5500LUX (normal)
(Type 1: 0-12000LUX)
Type 2:0- 22000LUX)
Heating power: 500W (RTOP-1000: 1000W)
Compressor power: 190W-320W
Compressor delay guard time: 3min
Noise: <70Db
Humidifier water tank capacity: 5L
Working mode: continuous operation (compressor intermittent working)
Working environment: temperature 0-40℃, humidity<80%RH Non-corrosiveness gas
Power: 220±22V, 50±0.5HZ

Model difference

Model	Volume	Boundary dimension	Period control mode	Illuminance (LUX)
RTOP-150B RTOP-150D	150L	520 × 550 × 1600mm	day period and night period, automatic; 1-30 periods, automatic	0-3000-5500 can choose 3000LUX for seed germinating; can choose 5500LUX for seedling germinating.Illuminance of incubators can be increased by user requirement.
RTOP-260B RTOP-260D	270 L	590 × 590 × 1655mm		
RTOP-268B RTOP-268D	268 L	590 × 590 × 1655mm		
RTOP-280B RTOP-280D	280 L	590 × 590 × 1695 mm		
RTOP-300B RTOP-300D	300 L	590 × 590 × 1785 mm		
RTOP-310B RTOP-310D	310 L	590 × 590 × 1785 mm		
RTOP-380B RTOP-380D	380 L	660 × 660 × 1770 mm		
RTOP-430B RTOP-430D	430 L	660 × 660 × 1890 mm		
RTOP-500B RTOP-500D	500 L	692 × 692 × 2000 mm		
RTOP-1000B RTOP-1000D	1000 L	1260 × 660 × 1985 mm		

Automatic Seed Counter

Model: SLY-C

Characteristic

- Microcomputer automatic control, touch key, completely automatic operation.
- Count speed is adjustable, high accuracy; metal shell, elegant appearance.
- Both round and microscler seeds are suitable.



Technical parameter

Count range: small and middle sample: 0.7-4 mm×0.7-12mm big sample: 3-10mm×3-12 mm
 Count accuracy: big and middle sample: 2/1000;
 small sample: 4/1000
 Count speed: ≥1000 /3min (it's based on level 2, if you want fast

Power: 220V 50Hz
 Continuous working time: ≥5hr
 you can turn to level 3-7)
 Count capacity: 1-99999

Grain Moisture Meter (with volume-weight)

Model: LDS-1G

Technical parameter

- Test object: nonmetallic granulated materials such as cereal, wheat, rapeseed, soybean, vegetable seeds, corn, feed etc.
- Test error: $\leq \pm 0.5\%$ (main moisture range)
- Repeatability error: $\leq 0.2\%$
- Test range: 3-35%
- Working environment: 0-40%
- Temperature compensation: automatic
- Net weight: 830g
- Display mode: highlight & backlight LCD
- Communication mode: Rs232
- Attached function: volume-weight conversion display, sample weight display, temperature display, and moisture average calculation
- Calibration: 4 points calibration, unlimited sample (20 common varieties have been calibrated in advance, can be tested directly)
- Working power: AC/DC, DC6V (4 AA dry batteries)/special external power adapter



High Accuracy Automatic Seed Counter

Model: SLY-D/SLY-E

Product description

SLY-D: with SD card, data can be stored and export. with the weighing function.

SLY-E: with SD card, data can be stored and export. with the weighing function.



Characteristic

Adjustable counting speed
 Sensitivity adjustable, make the results more accuracy
 Two modes for choosing: unlimited counting, and counting stop.
 Auto save your previous counting
 Shortcut menu operation.
 4G SD card including.
 Weighting function including

Microcomputer automatic control system.
 LCD display; light touch key.
 It is suitable for measuring round and long, small and big seeds
 Direct read data on screen, such as current seeds counter number, counting mode, sensitivity, weight and counting time etc.

Technical parameter

Counting range: L*W less than 12*4mm (small seeds)
 L*W less than 12*10mm (big seeds)
 Counting accuracy: 5/1000 for small seeds; 3/1000 for big seeds
 Counting speed: 1000pcs/ 3m
 Counting capacity: 1-99999 (read through LCD)
 Preset self stop: any value within 1-99999
 Weighing range: 0-1000g
 Size: 450*300*320mm
 Power supply: AC220±10% 50Hz
 Watt: <60W
 Continuous working time: ≥ 5h

Grain Moisture Meter

Model: LDS-1H/LDS-1S

Characteristic

- Automatic weighing; Automatic temperature compensation; Automatic moisture test; Automatic power off
- Empty machine revises moisture; the newest compensation model; AC/DC
- Users can calibrate and correct error.



Technical parameter

Test error: $\leq \pm 0.5\%$ (main moisture range)
Repetition error: $\leq 0.2\%$
Test range: 3-35%
Test time: $\leq 10s$
Sampling mode: Quantify: 150g (except special samples)
Working compensation: automatic
Working environment: 0-40℃
Net weight: 860g
Working power: 4 AA dry batteries
Calibration: floating 3 points calibration, unlimited sample (common varieties have been calibrated in advance, can be tested directly)



Model difference

Model	Function difference
LDS-1H	Testing field seeds: rice, bean, wheat, rapeseed, corn, barley, etc.
LDS-1S	Testing vegetable seeds: tomato, eggplant, Chinese chives, turnip, cowpea, green vegetables, etc.



Seed Neatness Workbench

Model: TJD-1300

Characteristic

- Steel and wood material, laminate surface.
- Super-thin light panel, soft and even white light
- The polarized light against dazzling transmission observation platform, can electrically adjust dark field.
- Transmission illumination function (The polarized light equipment can filter the disturbance of background light source completely, observe and examine the seed, seedling, plant leaf blade, colony etc carefully, and it applies to photographing high quality pictures).
- Large diameter live arm type illumination magnifying glass.

Technical parameter

Magnification: 0-7 times
Surface size : 130cmx65cm
Luminous panel size: 65cmx45cm
Polarized light platform: $\Phi 16cm$
Accessory: Manual counter, grain-counting board

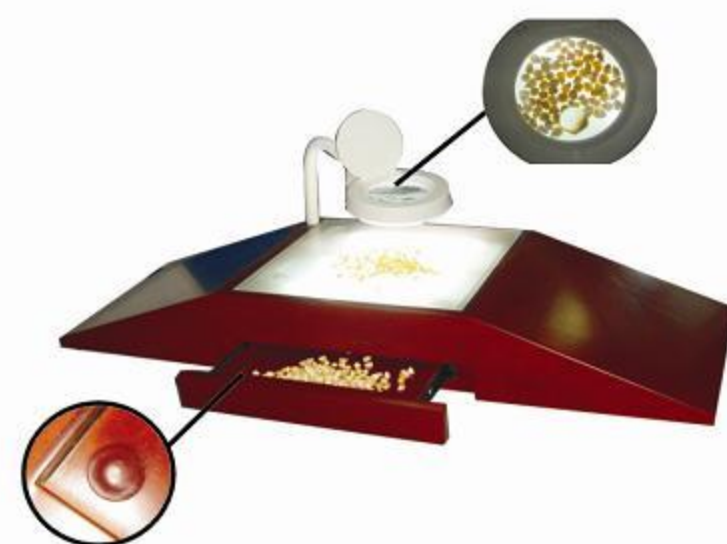


Seed Neatness Workbench

Model: TJD-900

Characteristic

- Both sides of workbench adopt slope design according to the human body engineering principle, the operation is comfortable and labor-saving.
- Removable drawer is at the bottom of the instrument to store well-chosen seeds.
- Extended edge is designed on the left, right and back side of workbench to avoid seeds' lateral leakage.
- Glass surface can be drawn out to replace tube easily.
- The original seeds-fall holes are advantageous to take out the chosen seeds.
- Wooden structure, ultra thin observation platform, provided with desktop illumination magnifying glass.
- Standard configuration contains 2 different chromaticity glasses with wide applicability.



Technical parameter

Magnification: 0-7 times
Surface size: 360x330cm

Tablebase size: 940x330cm
Luminous panel size: 300x270cm

Seed Neatness Workbench

Model: TJD-800

Product description

TJD-800 is used come with magnifier. There are lighting devices on both the top and bottom of its observation platform, convenient for observing and cleaning seeds. Observation platform with soft white light and even reflection can magnify testing objects, used for seeds purity testing.

Technical parameter

Magnification: 0-7X
Illumination power: 20-30W
Power: 220V, 50Hz
Net weight: 8kg



Vacuum Seed Counting and Placing Apparatus

Model: ZLC-2000

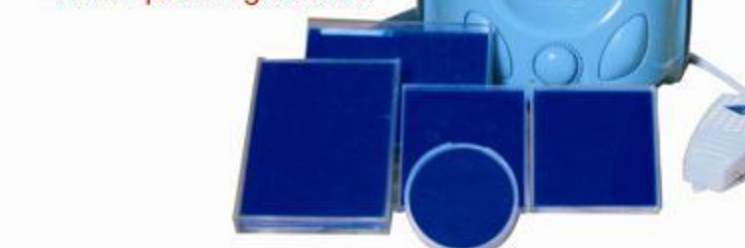
Characteristic

- Used for seed counting, suction and placing in the course of seed germination.
- Made up of main machine, suction tube and suction head.
- With control button to control the suction power according to seed size.
- With 5 different seed suction heads, its size and specification match with Petri dish, meet needs of different seed germination.

After sucking seeds



After placing seeds



Technical parameter

Environment temperature: $\leq 40^{\circ}\text{C}$
Power: 220V/50Hz, 1200W
Shape size: 300x250x400mm

Suction plate: 5pcs
Suction size: 13x19 (100 Holes, 50 holes/pc)
11.5x11.5 (100 holes, 2pcs), $\Phi 8$ (100 holes/pc)

Seed Blower

Model: CFY-II

Working principle

Classify samples according to aerodynamic behavior (floating speed) of particulates in air stream.

Characteristic

Metal shell, strong vibration resistance.
Beautiful shape, small noise, reliable operation, good safety.
Wind speed is adjustable according to granule size.
Can achieve the best effect, and can be timed.

Technical parameter

Max air volume: $3.8\text{m}^3/\text{min}$
Max wind pressure: 1300 pa
Noise: $\leq 50\text{dB}$
Timing: 0-10 min

Power: 220V 50Hz, 180W
Weight: 25KG
Size: 41x46x66cm



Electric Sieving Apparatus

Model: DSX



Characteristic

- Separate automatically.
- Compact and reasonable structure.
- Smooth operation, stable performance, easy to operate.

Technical parameter

Max sieving quantity range: 500g
Sieving frame level: 3 layer
Sieving range: 100mm
Rotating speed: 115±5r/min

Sieve diameter: 220mm (sieve should be bought separately)
Power: AC220V 50Hz, 60W
Weight: 12kg

Electric Centrifugal Divider

Model: LXFY-2

Characteristic

Electric Centrifugal Divider is suitable for each kind of seed, grain, and food seed sample precise divider. The machines can divider the sample into two equal parts in a very short time, especially for same small seeds.

Technical parameter

Size: 33 × 33 × 49cm
Packing Size: 38.1 × 38.1 × 55.9cm
Work error: < ±0.5% per kg
Power: 220V 50HZ
Packing list: one unit of machine and 3 units of sample holder



Riffle Divider

Model: HGT- I / HGT- II / HGG- I / HGG- II



HGG series



HGT series

Model difference

Model	HGT-I	HGG-I	HGT-II	HGG-II
Material	Iron plate coating	stainless steel	Iron plate coating	stainless steel
Groove quantity	16		12	
Groove width	12.7mm		25.4mm	
Max sample classifying quantity	150 ~ 1200g		300 ~ 2000g	
Shape size	315 × 240 × 260mm		420 × 240 × 280mm	
Application range	middle and small seeds: rice, wheat, etc.		big seeds: bean, corn, etc.	
Specification	middle and small		big	

Seed Aging Cabinet

Model: LH-150

Characteristic

- Microcomputer intelligent temperature controlling, PID set, display temperature automatically, warning and leakage of electricity protection, time set, accurate and reliable temperature controlling.
- Double door structure, inside door adopts steel glass, observing condition inside the cabinet does not affect temperature.
- Stainless steel workroom, precise heating mode, uniform temperature, can maintain long-time constant temperature when power off.



Technical parameter

Temperature controlling range: 5-65℃ (with compressor)
Temperature accuracy: ≤ ±0.5℃
Max humidity: 95% RH
Humidity accuracy: ±5%RH
Volume: 150L

Intelligent Low Temperature-Humidity Seed Cabinet

Model: CZ series



Characteristic:

- Microcomputer automatic set and control temperature, humidity and time.
- Control system has functions of defrosting, delay, overheat alarm, automatic dehumidifying, jet lag correcting, ultraviolet radiation sterilizing.
- Made by stainless steel, air cooling system, anti-frost.
- Multi-security protection (electric shock and leakage, overload, overflow, compressor delay start)

Technical parameter

Temperature range: 1-10℃
Temperature accuracy: ±1℃
Humidity range: 40%-60% RH

Humidity controlling accuracy: ±7% RH
Control mode: automatic
Power: 220V 50Hz

Model difference

Model	CZ-450FC	CZ-1000FC	CZ-1600FC
Volume	450L(double-door)	1000L(2 double-door)	1600L(3 double-door)

Pesticide Residue Meter

Model: NY-1D

Technical parameter

Transmittance accuracy rate: ±3%
Transmittance Repeatability: ±2%
Linear error: ±5%
Button: Panasonic soft key
Working environment: 0-40℃
Working humidity: 35-85%RH



Characteristic

- Automatic display of results.
- Semi-permanent light, long lifetime
- Built-in 3.7V rechargeable Li-ion. 5V power adapter.
- LCD with backlight, the backlighting time is adjustable.
- A scroll bar allows checking the history records.
- Self-calibration, self-clocking, self power-off.
- 500records can be stored.
- USB interface for upload data to PC.
- Including software. be able to read, edit, manage, review and print the results.

Pesticide Residue Meter

Model: NY-8D

Characteristic

- Testing pesticide residue in onion, garlic, ginger, fragrant-flowered garlic, carrot, tomato, etc.
- Color reaction under room temperature condition, fast testing speed.
- Plastic shell, streamline appearance, 6 inch color LCD displayer, easy to operate.
- High sensitivity to methamidophos, dichlorophos and so on.
- Adopt ARM9 inserting controlling system, with the function of saving, collecting, processing, analyzing.
- RS-232 connector, can single use and can also connect with computer to deal with datum.
- Enzyme reagent has excellent thermal stability, convenient for transportation and storage in hot seasons.



Technical parameter

test item	sdetection limit	detection range
pesticide residue	0.1-20mg/kg	0-100% (value rate)

Transmittance accuracy: $\leq \pm 1.5\%$;
Sensitivity: potassium dichromate solution $\geq 3.17 \times 10$ (A/ug.ml), copper sulphate solution $\geq 4.50 \times 10$ (A/ug.ml)
Stability: after 20m pre-heating, transmittance (T) value occurred by light current excursion within 3m $\leq 1.0\%$ (or absorbance (A) value 0.005)
Display: LCD
Interface: network
Power adaptor: 220V $\pm 10\%$

Falling Number Meter

Model: FN-II

Product description

Falling Number Meter can test active amylase in grain and accurately judge the damage of grain germination. It's a necessary testing instrument in areas of grain storage, flour processing, food processing and so on.

Technical parameter

Stirring rod weight: $25 \pm 0.05\text{g}$
Water bath barrel heating pipe: 600W
Viscosity tube: inside diameter: $21 \pm 0.02\text{mm}$
outside diameter $23.8 \pm 0.25\text{mm}$
inside height $220 \pm 0.3\text{mm}$
Repeatability: difference of the two testing results does not over 10% of average value
Size: 420x340x350mm
Weight: 25kg
Power: AC 220V, 50Hz



Model difference

Model	FN	FN-II
Volume	Without printing function	Without printing function

Magnetic Metal Meter

Model: JJCC

Product description

Magnetic Metal Meter is a specialized instrument for testing magnetic metal content in flour food. It applies to the department of quality supervision, flour processing, food storage and transportation, marketing, scientific research and so on.

Technical parameter

Magnetic induction: $\geq 120\text{mT}$
Ferromagnetic area size: 130mmx130mm
Separating plate size: 210mmx210mmx6mm
Power: AC220 \pm 22V, 50Hz, 1A
Motor (double scraper) rotation speed: 50r/min

Electromagnet attractive force: $\geq 40\text{ kg}$
Sample size: $\leq 1\text{ kg}$
Recovery rate: $\geq 95\%$
Size: 255x275x385 mm
Weight: 12 kg



Amylose Tester

Model: DPCZ-II

Product description

The whole system is made up of Amylose Tester and computer system connected by RS-232, which can collect and transmit datum. The whole system is controlled by the system software of Amylose Tester.



Characteristic

- Adopt laser light tester and software system of CCD rice exterior quality image analyzing and identifying.
- High-accuracy, easy to operate.

Technical parameter

Testing object: rice, corn, wheat, and so on
Testing parameter: amylose content
Operating system: Windows 98/2000/ME/XP
Testing time: about 1 min
Unit: %
Power: $220 \pm 1\text{V}$
Temperature: $20^\circ\text{C} - 30^\circ\text{C}$

Digital Flour Quality Analyzer

Model: HZF-150

Characteristic

- Flour-rubbing bowl can be interchangeable, programs can identify bowl type and automatically adjust.
- Overload protection function: alarm and shutdown when stirring torque is too large.
- One-button automatic water system instead of hand-press rubber ball, control adding water to burette, labor-saving and high-efficiency.
- Simultaneously display up to 10 flour quality graphs, convenient for comparing differences.
- Results saved in Access database, convenient for viewing. Multi-security protection measures: double-button start; stop automatically when opening the cover.
- Intelligent programs respond to instrument movement, start drawing graphs automatically.



Technical parameter

Motor power: 200W
Power: AC220V, 50Hz / AC380V, 50Hz
Computer connector mode: USB
Torque testing mode: electronic torque sensor
Weight: 75kg (with 300g bowl)/70kg (with 50g bowl)
Accuracy: no more than 0.5% of measuring range
Main doughing cutter rotation speed: $63 \pm 2\text{r/min}$

Sub-doughing cutter rotation speed: $94.5 \pm 3\text{r/min}$
Coordinate scale range: horizontal axis: 0—20min, vertical axis: 0—1000FU
Horizontal axis speed: 10mm/min
Sample weight: 300g (300g bowl) or 50g (50g bowl)
Shape size: 95(L)x53(W)x62(H) cm

Digital Dough Tensile Analyzer

Model: HZL-350

Characteristic

- Drawer-type box, with coil spring and the oil damping guide rail, easy to start.
- Enclosed circular arc contour, with dustproof and heat preserving function, delicate appearance.
- Simultaneously display up to 5 groups of tensile curves, convenient for comparing differences.
- Results saved in Access database, convenient for viewing.
- Electronic sensor tests stretching resistance, accurate and reliable.
- Procedure automatic zero calibration, start drawing graphs automatically.
- Computer collecting, analyzing data, simple and highly-efficiency.



Technical parameter

Sample weight: flour 300g+6g salt +distilled water
Kneading-ball machine rotation speed: 83 ± 3 r/min, automatically stop after 20r.
Rubbing machine rotation speed: 15 ± 1 r/min
Dough-pulling hook speed: 14.5 ± 0.05 cm/s

Tension testing mode: electronic pressure sensor
Computer connector: USB
Power: AC220V, 50Hz
Size: 92(L)x64(W)x95(H) cm
Weight: about 115kg

Whiteness Analyser

Model: WSB-V



Product description

Whiteness Analyser is used to test whiteness of objects. It applies to the department of flour, starch, ground rice, salt, textile, printing and dyeing, chemical fiber, plastic, porcelain clay, talcum powder, white cement, paint, ceramic, enamel, paper, pulp and so on. It has two types, one is with printing function and the other is without printing function.

Characteristic

- Microcomputer control, LCD displayer, touch key, delicate appearance.
- Energy-saving and environment-protecting.
- Automatic calibration, stable and reliable.

Technical parameter

Diffuse illumination and vertical detecting method(d/o), simulation D65 illuminant, adopt d/o illuminating and viewing geometrical condition; globe of diffusion diameter is 120, measuring hole diameter is 20mm.; have light adsorber, can eliminating the effect of reflected ray from sample mirror surface.
Repeatability: ≤ 0.1
Indicating value drift: ≤ 0.1
Zero drift: ≤ 0.1

Indicating value error: ≤ 0.5
Output mode: digital display, built-in printer (can be with printing function or not according to user needs)
Working environment: temperature: $0-40^{\circ}\text{C}$, relative humidity $<80\%\text{RH}$
Power: AC (220+22) V, 50Hz
Size: 220x295x375mm Weight: 10kg

Single-head Gluten Tester

Model: MJ-III A

Characteristic

The MJ-III A Gluten tester is a professional instrument for testing gluten content, gluten index and gluten water retention rate in the flour. It's suitable for wheat flour and entire wheat flour testing. And it's widely used in food and flour processing department, grain and oil scientific research institution, grain storage department etc.



Technical parameter

1. Agitator rotation speed: 120 ± 2 r/min
2. Thin wash net code: GFIW0.080/0.045 (plain weave: 200mesh)
3. Thick wash net code: GFIW0.0630/0.315 (plain weave: 26mesh)
4. Wash liquid flow capacity: 50-56ml/min (adjustable)
5. Dough making time: 1-99s (Set per second)
6. Wash time: 1-9min (Set per minute)
7. Centrifugal rotation speed: 6000 ± 5 r/min
8. Centrifugal time: 1min
9. Dryer temperature: $150 \pm 2^{\circ}\text{C}$

10. Repetition
 - (1) Gluten content: The difference between two testing results should less than 1.0%
 - (2) Gluten index: Admissible error of two testing results should less than 11 units in index 70-100. Admissible error of two testing results should less than 15 units under index 70.
11. Power: AC220V $\pm 5\%$ 50Hz
12. Work environment: temperature $0-40^{\circ}\text{C}$; Relative humidity: $\leq 80\%$
- 13 . Sizes: 420x330x240 mm³
- 14 . Weights: 20kg

Electronic Volume-weight Apparatus

Model: GHCS-1000 series

Product description

Electronic Volume-weight Apparatus is widely used in volume-weight testing of grain such as wheat, rice, sorghum, corn and so on. It can work out the levels according to standard requirements at the same time. Therefore, it plays a key role in grain purchasing, storage, processing.



Characteristic:

- Can be chargeable.
- Adopt imported components with high density and reliability, save components installing space of inner structure.
- Adopt advanced electronic weighing technology and computer technology, displaying weighing results meanwhile automatically printing testing results.
- Mechanical part has been selected and processed delicately, with unique color and beautiful appearance.
- Easy to operate, with high accuracy and fast measuring.

Technical parameter

Max weighting: 1000±2g
Min weighting: 100g
Resolution: 1g
Volume-weight bucket volume: 1000±1.5ml
Power: 220V, 10W
Environmental temperature: 5-40℃
Relative humidity: <90%RH

Model difference

GHCS-1000	Small granule grain electronic volume-weight apparatus
GHCS-1000(P)	Small granule grain electronic volume-weight apparatus (with printing function)
GHCS-1000A	Large granule grain electronic volume-weight apparatus
GHCS-1000A(P)	Large granule grain electronic volume-weight apparatus (with printing function)
GHCS-1000L	Large and small granule grain electronic volume-weight apparatus
GHCS-1000L(P)	Large and small granule grain electronic volume-weight apparatus (with printing function)

Round Flour Checking Sieve

Model: JYSY30x8

Product description

Round Flour Checking Sieve is a specialized instrument for testing flour thin and thick degree. Separate sample in different sieves automatically and calculate flour thin and thick degree according to residue on sieves. It has characteristics of electronic time controlling, high-accuracy, compact structure, stable performance and easy operation.



Technical parameter

Mesh size: ϕ 300mmx30mm
Mesh specification: 25 mesh, 41 mesh, 51 mesh, 69 mesh, 76 mesh, 91 mesh, 107 mesh
Gyratation diameter: 50mm
Gyratation speed: 260r/min
Sample weight: 50.0g
Timing range: 0-900s
Power: AC220±10V 50Hz, 60W
Size: 360mmx392mmx425mm
Weight: 22.5kg

Lovibond Colorimeter

Model: WSL-2

Product description

Lovibond Colorimeter is a kind of visual color measuring instrument. It adopts international recognized special color standard---Lovibond color standard, to test various chroma of liquid, colloid, solid and powder samples. It can test color of materials such as plastic, spinning and weaving, food, jam, grain, fat and oil, rosin, spice, rubber and so on. Transmittance method is suitable for testing liquid and transparent colored materials, while reflection method is suitable for testing non-transparent materials.



Characteristic

- Design fully complies with the international recognized Lovibond color standard.
- Color matching in each viewing field, high sensitivity.
- Simple and visualized Lovibond digital color language, quantitative description of color testing results.
- Can test visual color effect of various materials in the visible spectral range.
- Simple structure, easy to operate.

Technical parameter

Measuring range: Red: 0.1- 79.9 lovibond unit
Yellow: 0.1- 79.9 lovibond unit
Blue: 0.1- 49.9 lovibond unit
Neutral grey: 0.1-3.9 lovibond unit
Min reading: 0.1 lovibond unit
Accessory: 10mm 25.4mm 133.4mm
White board diffuse reflectance: >80%
Weight: 10kg

Lab Whirlwind Mill

Model: FS-II

Working Principle

Lab Whirlwind Mill adopts high-speed whirlwind grinding principle. Samples slowly added in feed inlet are thrown to mill ring by high-speed cyclonic flow produced by impeller. They will be impacted into powder and sent to sample collection bottles by wind path. Finally get the required samples.

Characteristic

- Suitable for making grinding samples, efficiently and rapidly grind wheat, corn, rice, mung bean, soybean and so on.
- Provide biochemical index such as falling number, gluten parameter, viscosity and so on with standard powder samples.
- Creative return air wind path, reduce sample loss, improve flour yield.
- Touch key, prevent dust pollution, improve reliability. Grinding process without losing protein and fat content.



Technical parameter

Motor power: 370W
Grinding out rate: > 98%
Impeller rotation speed: 10000 turn / min
Grinding fineness: 60-100 mesh
Average sample flow: 150 g / min

Chlorophyll Meter

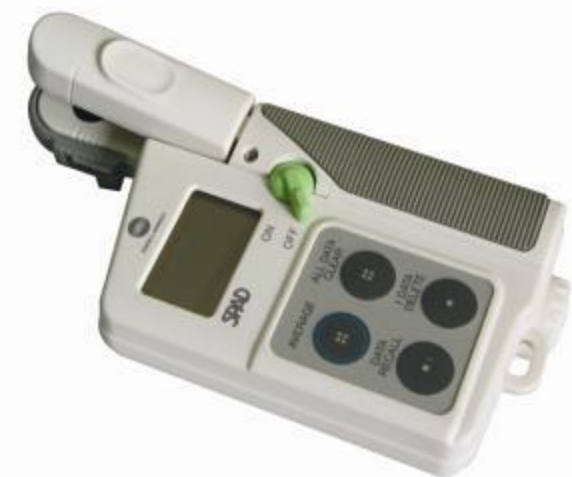
Model: SPAD-502PLUS

Product description

SPAD-502PLUS Chlorophyll Meter can measure relative content of chlorophyll, non-destructive to leaves. Measured datum will be displayed in trend graph. It can be used to enhance the utilization rate of nitrogen fertilizer.

Technical parameter

Measuring mode: 2 wavelength optical density difference	Measuring interval: 2s
Measuring area: 2 mmx3 mm	Accuracy: within ± 1.0 SPAD (under room temperature, SPAD value: 0 - 50)
Sensor: silicon semiconductor photodiode	Repeatability: within ± 0.3 SPAD (SPAD value: 0 - 50)
Display mode: LCD, 4 decimals, trend graph	Reproducibility: within ± 0.5 SPAD (SPAD value: 0 - 50)
Measuring range: -9.9 - 199.9 SPAD	Volume: 164x78x49mm (LxWxH)
Memory capacity: 30 datum, automatically calculate and display average value	Weight: 225g
Power: 2 AA batteries (1.5V)	Working environment: 0-50°C
Battery life: more than 20,000 times	Other functions: alarm, calibration



Brand: Konica Minolta

High-accuracy Moisture Meter (with volume-weight)

Model: GAC-2100AGRI

Characteristic

- Appointed by USDA-FGIS for testing grain moisture.
- Not influenced by dry or wet condition, can test moisture and volume weight accurately.
- Testing parameter: moisture, volume weight, sample temperature.
- Get the result in 15 seconds. This result is as same as the oven method measured.
- LCD display, high accuracy, fast testing speed.
- With printing function (optional), RS232 connector, can connect with computer.
- Automatically sample inlet, automatic weighing, automatic sample temperature compensation, automatic surface water compensation.



Brand: Dickey-john

Technical paramete:

Moisture range: 5-45% Error: $\pm 0.2\%$ Sample weight: about 250g
Repeatability: $\pm 0.1\%$ Resolution: $\pm 0.1\%$

Portable High-accuracy Moisture Meter

Model: MINI GAC PLUS

Characteristic

- 20 types of grain standardizing.
- Can test grain with high temperature, max
- Temperature: 70°C
- LCD displayer, easy to read.
- Download the grain standardizing or change the menu language via USB connector.

Technical paramete:

Powerful function: curve global download, can test 450 products, automatic temperature compensation, scrolling menu operation system
Moisture accuracy: $\pm 0.2\%$ (mainly according to grain type)
Volume-weight accuracy: $\pm 0.5\text{kg/h}$ (mainly according to grain size)
Moisture measuring range: 5-45% (mainly according to grain type)
Grain measuring temperature: 0-50°C automatic temperature compensation
Display mode: LCD display moisture, temperature and volume-weight
Measuring time: 10-15s Result accuracy: $\pm 0.2\%$
Accuracy: 0.5°C Resolution: 0.1°C
Repeatability: $\pm 0.2\%$ Power: 9V alkaline battery



Brand: Dickey-john

Pocket Refractometer

Model: PAL-1



Brand:Atago

Characteristic

- Big LCD digital display, automatic temperature compensation, battery operation, light and portable.
- High-performance spectralite prisma, durable and scratch-resistant.
- Innovative design of metal sample sink, can quickly keep sample temperature the same as prisma.
- Easy to get sample and difficult to leak.
- Easy to maintain, comply with IP65 standard, can wash by water directly.

Technical parameter

Measuring range: Brix0.0-53.0%
Min scale: Brix0.1%

Measuring accuracy: Brix±0.2%
Temperature compensation: 10-60℃

Hand Wheel Electric Heating Steam sterilizer

Model: LDZX Series

Characteristic

- Hand wheel type of quick-open door structure
- Computer control auto recycle sterilizer
- LCD screen indicate working state
- Pressure safety lock
- Temperature scope 50-126
- Time scope 0-99h
- Overpressure auto-discharging 0.145-0.165MPa
- Automatic shut down with beep reminding after sterilization
- Full stainless steel



Model difference

Model	Volume	Voltage	Consumed Power	Chamber Dimension	Weight	Dimension
LDZX-30KBS	30L	220V	3Kw	(/)350x330	60kg	580x580x1000
LDZX-40KBS	40L	220V	3.5Kw	(/)350x450	80kg	600x580x1250
LDZX-50KBS	50L	220V	3.5Kw	(/)350x520	80kg	600x580x1250
LDZX-75KBS	75L	220V	3.5Kw	(/)388x650	90kg	600x600x1400

Portable pressure steam sterilizer

Model: DSX Series



Characteristic

- Shift place type of quick-open cover structure.
- Intelligent auto-control sterilization cycles
- Pressure self-locking device.
- Double scale numerical indication pressure gauge.
- Self inflating type seal.
- Fixation pressure device.
- Automatic discharge of cold air.
- Electric heating.

Model difference

Model	Technical parameter
DSX-280A	Volume: 18L Weight: 12kgs
DSX-280B	Size: A: 405*405*615 B: 420*420*600

Vertical Cell Electrophoresis

Characteristic

- Flat aluminum board that is specially dealt and keeps sound result of gel scattering heat
- Simple to install, four screws to fix
- Less buffer, no leaking, clear and straight stripes
- Supplying the water pipe connecting to Constant-temperature Cycler and reach to the temperature keeping gel constant
- Supplying matched Gel Caster
- Switching off when opening the lid, guidelines with protecting sheaths



Technical parameter

Gel size (W×L):12×14(cm)
Gel thickness: 1, 1.5 (mm)
Comb wells: 16,23
Gel capacity: 2
Buffer requirement: 1200(ml)
Dimension (L×W×H):26.5×17×23(cm)
Weight: 5.8(Kg)

STEREO MICROSCOPY (binocular)

Product description



As it can produce upright three-dimensional image when observing, Kappa angle of left and right is 12°, third dimension is strong, imaging is clear and wide, it has longer working distance and may choose reflection illuminating and transmission illuminating according to observed sample, PXS-type large-view field stereo microscope is widely used for teaching demonstration, biology anatomy, police observing and analysis as well as for precise parts assembly and examination in electron industry, seed examination in agriculture, etc.

Characteristic

Model	Technical parameters
PXS-1030	Binocular, Total zoom multiple: 10-30X
PXS-1040	Binocular, Total zoom multiple: 10-20X
PXS-2040	Binocular, Total zoom multiple: 20-40X

ZOOM-STEREO MICROSCOPE (binocular)

Picture			
Model	XTT	XTZ-D	PXS-D
Technical parameters	Binocular, eyepieces6.3X, 25X	Binocular, Eyepieces10X, 7-45times7-45X (choose objective lens 2X, eyepieces 20X, it can be 7X-180X)	
Characteristics	High resolution, strong upright three-dimensional image; Binocular inclined 45'; Adjustment Interpupillary: 55-75mm		Adopt high-point eyepiece, long working distance up to 100mm, Convertible 1:7, provide projector and transmission illumination system, and can add large lens 0.5X & 2.0X

Biological Microscope

XSP-2CA: Binocular, fur lens, 1600X, Light source
XSP-8C: Binocular, four lens, introversive converter, 1600X, Light source
XSP-8CA: Trinocular, four lens, introversive converter, 1600X, light source
XSP-6C: Binocular, four lens, 1600X

Picture				
Model	XSP-2CA	XSP-8C	XSP-8CA	XSP-6C

Electronic balance

Picture						
Model	FA1104N	FA2104N	AR124CN	AR224CN	CP124C	CP224C
Measuring range	0~110g	0~210g	0~120g	0~220g	0~120g	0~220g
Measuring accuracy	0.0001g					

Picture						
Model	JA1103N	JA2103N	AR223CN	AR323CN	CP223C	CP423C
Measuring range	0~110g	0~210g	0~220g	0~320g	0~220g	0~420g
Measuring accuracy	0.001g					

Picture				
Model	MP502N	SL502N	SL1202N	SL2002N
Measuring range	0~500g	0~500g	0~1200g	0~2000g
Measuring accuracy	0.01g			