1. Product Introduction:

Complete supporting facilities: The instrument integrates medicine, apparatus and instrument into one, which is easy to carry and equivalent to a small mobile laboratory. It does not require users to equip accessories by themselves, and can also be flexibly tested in the field. It is suitable for agricultural service departments or agricultural material dealers, colleges and universities, scientific research institutes, cooperatives, fertilizer manufacturers, large growers to test soil and fertilize, identify the authenticity of fertilizers and environmental protection testing applications.

Complete testing functions: The test items are comprehensive at home and abroad. In addition to the standard reagents, other types of reagents can be added and purchased.

Simple operation, fast speed, a complete set of accessories and finished reagents are ready to use after opening the bottle, and no configuration is required.

Reliable performance: The working stability is 6 times better than the national standard JJG179-90 index, and the repeatability reaches the index level of grating spectrophotometer.

2. Multiple functions and complete test items:

1. Soil nutrients: • Soil ammonium nitrogen, soil available phosphorus, soil available potassium, soil nitrate nitrogen, soil hydrolyzed nitrogen, soil total nitrogen, soil total phosphorus, soil total potassium, soil organic matter (Qiu Lin method), soil organic matter (extraction method), soil total organic carbon, soil carbon-nitrogen ratio, pH value, salt content, water content, •Trace elements in soil: soil calcium,

Export Sales: +91-9829132777
India Sales: +91-9588842361

IT-2013, Ramchandrapura Industrial Area,
Sitapura Extension, Jaipur-302022, India.

info@tesca.in
www.tescaglobal.com

soil magnesium, soil sulfur, soil silicon, soil boron, soil iron, soil copper, soil manganese, soil zinc, soil chlorine, soil molybdenum; • Soil heavy metals: soil arsenic, soil chromium, soil nickel, soil aluminum, soil fluorine, soil titanium, soil selenium.

2. Fertilizer nutrients: • Single element fertilizer: ammonium nitrogen in nitrogen fertilizer, nitrate nitrogen in fertilizer, urea nitrogen, biuret, phosphorus in phosphate fertilizer, water-soluble phosphorus in phosphate fertilizer, potassium in potash fertilizer; • Total nitrogen in compound fertilizer, total phosphorus in compound fertilizer, total potassium in compound fertilizer; • Total nitrogen in organic fertilizer, total phosphorus in organic fertilizer, total potassium in organic fertilizer, nitrate nitrogen in organic fertilizer, quick-acting phosphorus in organic fertilizer, quick-acting potassium in organic fertilizer, acid-soluble nitrogen in organic fertilizer, organic matter; • Water-soluble humic acid (weathered coal), water-soluble humic acid (lignite), water-soluble humic acid (peat), free Humic acid (weathered coal), free humic acid (lignite), free humic acid (peat); • Water-soluble fertilizer total nitrogen, water-soluble fertilizer total phosphorus, water-soluble fertilizer total potassium; • Foliar fertilizer total nitrogen, foliar fertilizer total phosphorus, foliar fertilizer total potassium; • Various fertilizer trace elements: fertilizer calcium, fertilizer magnesium, fertilizer sulfur, fertilizer silicon, fertilizer boron, fertilizer iron, fertilizer copper, fertilizer manganese, fertilizer zinc, fertilizer chlorine, fertilizer molybdenum; • Fertilizer heavy metals: fertilizer arsenic, fertilizer chromium, fertilizer nickel, fertilizer aluminum, fertilizer fluorine, fertilizer titanium, fertilizer selenium.

3. Fresh crop nutrition: • Crop nitrate nitrogen, crop ammonium nitrogen, crop phosphorus, crop potassium; • Trace elements in crops: crop calcium, crop magnesium, crop sulfur, crop silicon, crop boron, crop iron, crop copper, crop manganese, crop zinc, crop chlorine, crop molybdenum; • Nitrate and nitrite in crops.

4. Dry plant nutrition: • Total nitrogen, total phosphorus, total potassium.

5. Tobacco leaf nutrition: • Total nitrogen, total phosphorus, total potassium, boron, manganese, iron, copper, calcium, magnesium, etc. 20 items.

6. Food (fruits, vegetables, etc.): • Nitrates, nitrites, heavy metals (chromium, arsenic, mercury), etc.

7. Water quality: • Ammonium nitrogen, phosphorus in water, potassium in water, nitrates, nitrites, hardness, PH, iron, copper, manganese, zinc, boron, chlorine, sulfur, silicon, molybdenum, etc.

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.

3. Test efficiency:

Simultaneous extraction and determination of multiple nutrients such as quick-acting N, P, and K in soil (drafter of the Ministry of Agriculture's rapid test industry standard).

Simultaneous, rapid, and accurate detection of nutrients such as nitrogen (N), phosphorus (P), and potassium (K) in fertilizers.

Test speed: Under normal proficiency:

It takes 20 minutes to test three items of a soil sample (N, P, and K) (including the time for preparation of reagents and pre-treatment of soil samples), ≤40 minutes to test three soil samples (N, P, and K) at the same time, and ≤ 1 hour to test 8 soil samples at the same time.

It takes ≤50 minutes to test one fertilizer sample (N, P, and K), and ≤1.5 hours to test three fertilizer samples (N, P, and K) at the same time.

4. Test error:

Soil nitrogen, phosphorus and potassium error ≤ 1%, organic matter error ≤ 2%, trace element relative error ≤ 5%; fertilizer single item error ≤ 0.5%, nitrogen, phosphorus and potassium three items error ≤1%;

Heavy metal relative error is less than or equal to 5%.

5. Features:

★1. Android smart operating system, the main control chip uses ARM Cortex-A7, RK3288/4-core processor, main frequency 1.88Ghz, faster operation speed and stronger stability.

★2. 18 detection channels, 16 samples can be quickly detected at one time, greatly improving detection efficiency and reducing detection costs.

★ 3. Adopting high-precision filter technology independent patent analysis method authoritative certification.

★ 4. Built-in calibration function during the detection process, intelligent constant current voltage regulation, automatic light intensity calibration, to ensure detection accuracy, and obtain the "Calibration Certificate" of the China Institute of Metrology.

★5. The instrument is equipped with USB interface and Ethernet interface at the same time, built-in large-capacity memory, and can copy data with a USB flash drive at any time.

★6. Built-in crop expert fertilization system, which can calculate the recommended fertilizer amount for the target yield of more than 100 kinds of national agricultural economic crops, fruit trees, etc., and scientifically guide agricultural production

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.

based on fertilization formula. The results of soil testing and fertilization formula can be printed, and the printed content includes: crop type, fertilizer type, target yield, total demand, and recommended fertilization plan.

★7. Built-in plant nutrition diagnosis standard atlas, according to the pictures of nutritional deficiencies of various crops, leaf comparison is carried out to diagnose abundance and deficiency.

★8. 4-wavelength professional test cold light source (red, blue, green, orange), the wavelength of the light source is stable, the light source has no temperature drift phenomenon for a long time of continuous work, the life span is up to 100,000 hours, the reproducibility is good, and the accuracy is high.

★9. The colorimetric cell part adopts a standard 1cm colorimetric dish, without mechanical displacement and wear, the optical path test positioning is accurate, and external light interference is effectively shielded to ensure that the test results are better than the national standard requirements.

★ 10. The instrument system is equipped with a sample pre-treatment operation video. Various sample detection methods can be viewed by clicking the video module. The test personnel do not need to self-study the manual. The guidance and teaching are convenient and fast, which is convenient for novices to operate quickly.

★11. Built-in new generation high-speed thermal printer (no ribbon required), the printed content includes: testing unit, testing personnel, testing items, channel number, absorbance, nutrient content (mg/kg), testing time, and QR code and other information

★ 12. Highly sensitive 7-inch true color touch screen, adopts more efficient and humanized operation, high-definition and high-interactive display, greatly reduces the cumbersome operation and errors of traditional instruments, and has obtained a number of "software copyrights".

★13. Built-in clock function, convenient operation time recording, long-term historical tracing.

★14. Built-in low voltage prompt function, can clarify the power during detection, avoid test data deviation, and has power-off protection function, automatically save data when power is off to prevent data loss.

★15. AC and DC dual-use power supply mode, built-in large-capacity rechargeable lithium battery, can work continuously for more than 10 hours when fully charged, and can be connected to an external vehicle power supply for storage.

★16. High-strength PVC engineering plastic suitcase design, durable and easy to carry.

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.

6. Technical parameters:

1. Power supply: AC 220 ± 22V, DC 12V+5V (built-in lithium battery can also be used as vehicle power supply)
2. Power: ≤5W
3. Range and resolution: 0.001-9999
4. Repeatability error: ≤0.03% (0.0003, potassium dichromate solution)
5. Instrument stability: No digital drift within one hour (transmittance measurement); digital drift within two hours does not exceed 0.3% (0.003, transmittance measurement), 0.001 (absorbance measurement).
6. Linear error: ≤0.1% (0.001, copper sulfate detection)
7. Sensitivity: red light ≥4.5 ×10-5, blue light ≥3.17×10-3, green light ≥2.35× 10-3, orange light ≥2.13×10-3
8. Wavelength range: red light: 680±2nm; blue light: 420±2nm; green light: 510± 2nm; orange light: 590±4nm
9. PH value (acidity): (1) Test range: 1~14 (2) Accuracy: 0.01 (3) Error: ±0.1
10. Salt content (conductivity): (1) Test range: 0.01%~1.00% (2) Relative error: ± 5%
11. Soil moisture technical parameters Moisture unit: % (g/100g); Moisture content test range: 0-100 %; Error less than 0.5%
12. Display resolution: 1024*600
13. Earthquake resistance: IP65
14. Instrument size: 48×34.5×22cm
15. Main unit net weight: 5.2kg

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.