AST-YJT Soil Organic Carbon Analyzer

Product Introduction

Multiple functions and complete test items:

Soil nutrients: Organic carbon; directly detected, no conversion required.

Expandable detection: Alkaline hydrolyzable nitrogen, nitrate nitrogen, ammonium nitrogen, available phosphorus, available potassium, organic matter, quick-release phosphorus, quick-release potassium, total nitrogen, pH value, moisture, acidity and alkalinity. Trace elements: Calcium, magnesium, sulfur, iron, manganese, boron, zinc, copper, chlorine, silicon, etc. Heavy metals: Lead, chromium, cadmium, mercury, arsenic, etc.

The instrument integrates temperature control heating, constant temperature water area, and reciprocating oscillation, equivalent to a small mobile laboratory, facilitating sample processing and testing, and saving time and effort.

Soil testing and fertilization system: Considering the nutrient requirements of the crops and the soil's nutrient supply capacity, as well as fertilization theories and the latest expert group opinions of the Ministry of Agriculture for soil testing-based fertilization, it recommends corresponding fertilization plans based on soil test data. Compared with the existing expert system, it is more flexible and scientifically reasonable.

Full polyester plastic shell, lightweight, sturdy and durable;

II. Product Specifications

1. Power supply: DC 7 - 9V (built-in lithium battery of the instrument)
2. Power: ≤ 6W
3. Repeatability error: ≤ 0.5% (0.005, potassium dichromate solution)
4. Linear error: ≤ 3% (0.03 copper sulfate detection)
5. 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

6. Wavelength range: Red light: 620 ± 4nm; Blue light: 440 ± 4nm; Green light: 510 ± 4nm; Orange light: 590 ± 4nm

7. Channels: 2 channels

8. Simultaneous extraction and determination of various nutrients such as available nitrogen, phosphorus, and potassium in soil.

9. The instrument does not require blank and standard preparations. The sample is directly placed and read directly, reducing the error caused by calibration by the user and ensuring the accuracy of the test results.

10. 5.1-inch large screen with backlight display in Chinese characters, automatically stores and prints test results, and can store more than 1000 test results.

11. Has a historical data query function, which can query and print test results and expert fertilization suggestions.

12. Data printing: Built-in thermal printer, which can print out information such as test date, test time, test item, crop type, crop yield, and fertilization amount.

13. Total time from sampling to printing out results:

Test one soil sample (nitrogen, phosphorus, potassium) ≤ 15 minutes, simultaneously test ten soil samples (nitrogen, phosphorus, potassium) ≤ 50 minutes;

Test single element of soil samples ≤ 30 minutes, simultaneously test ten single elements of soil samples ≤ 1 hour.

14. Instrument size: 1000mm * 500mm * 600mm

III. Product Features

Comprehensive Function: All testing items are included, and an expert fertilization system is built-in (all types of fertilizers can be purchased).

Complete Accessories: This instrument integrates medicine, equipment, and instrument into one, is convenient to carry, and functions as a small soil testing and fertilizer mixing station. It is suitable for agricultural service departments, agricultural chemical distributors, and fertilizer manufacturers for soil testing and fertilization formulation.

Easy to operate, no calibration required, direct testing, fast speed, the finished fertilizer can be used immediately after opening the bottle, no need for configuration.