

## Portable Pesticide Residue Detector PRM-12Y



### Description

Designed according to national standard methods (GB/T5009.199-2003), as well as the World Health Organization (WHO), Food and Agriculture Organization (FAO) pesticide residue detection standards, and the Environmental Protection Agency (EPA) reference intake requirements. It employs an enzyme inhibition rate colorimetric method for rapid and accurate detection of organophosphorus and carbamate pesticide content in fruits, vegetables, and other agricultural and forestry products. Both acetylcholinesterase and butyrylcholinesterase reagents can be used, meeting national and Ministry of Agriculture standards.

Widely used for the rapid detection of organophosphorus and carbamate pesticide residues in vegetables, fruits, tea, grains, and agricultural by-products; it can also be used for on-site testing in fruit, vegetable, and tea production bases and agricultural wholesale markets, as well as for rapid safety testing of fruits and vegetables before processing in restaurants, schools, canteens, and homes.

### Technical Advantage

- The chassis is made of industrial-grade ABS engineering plastic, making it easy to carry, sturdy, durable, and suitable for mobile testing.
- It features an Android operating system for a more user-friendly operation. The main control unit uses a multi-core processor with a 1.88GHz clock speed, resulting in faster operation and stronger stability.
- It automatically determines whether a sample is qualified, providing more intuitive test results.

- The instrument has a menu library of over 100 vegetable names, categorized and managed. 5. Vegetable names can be added or deleted as needed, edited, and directly printed.
- Testing Channels: 12 testing channels allow for simultaneous testing of multiple samples in a cyclical manner. Each sample is independently controlled by a program, preventing interference.
- The instrument has Wi-Fi connectivity, enabling rapid data upload to a computer for data management and statistics. It also features 4G and GPRS remote transmission capabilities, allowing for data transfer to a remote platform via a mobile phone SIM card.
- Display: 7-inch high-sensitivity true-color touchscreen display with a user-friendly Chinese interface, providing intuitive and simple readings.
- Printer: Uses a 5V serial port for printing, offering manual or automatic printing options. Results are available in three minutes, including the tester's name, absorbance difference, testing time, testing institution, sample name, and result judgment.
- Light Source: Employs imported ultra-high brightness LEDs, featuring low power consumption, high precision, strong stability, controllable light source (unused light can be turned off), and fast response.
- Intelligent constant current and voltage regulation, automatic light intensity calibration, and no temperature drift during prolonged continuous operation.
- USB 2.0 interface design facilitates data storage and transfer, allowing direct connection to a computer and computer control of the instrument. Enables data query, browsing, analysis, statistics, and printing.
- High level of intelligence; the instrument has self-testing functions: it features power-on self-test and zeroing functions, and automatic repeatability testing.
- The instrument has self-protection functions, allowing users to set usernames and passwords to prevent unauthorized operation.
- It uses DC 12V power supply, providing enhanced safety; a 6A lithium battery charger can be included.
- The instrument has recalibration, locking, and factory reset functions.

### Specification

Model	PRM-12Y
Wavelength Configuration	412nm
Inhibition Rate Display Range	0% ~ 100%
Inhibition Rate Measurement Range	0% ~ 100%
Transmittance Accuracy	±1.5%
Transmittance Repeatability	≤0.5%
Drift	≤0.005Abs/3min
Inhibition Rate Indication Error	≤10%
Inhibition Rate Repeatability	≤5%
Instrument Dimensions	43×35×20cm
Main Unit Net Weight	5.1kg
Instrument Packaging Dimensions	510*390*375mm
Packaging Weight	7.9kg

