



Analytical Technologies Desktop XRF G3005



Based on the mature technology of desktop X-ray fluorescence analyzer and the latest technological development, and on the performance of the existing international commercial handheld X-ray fluorescence analyzer, adding new elements into it on the basis of the first, second, and third generation, Analytical Technologies has developed the intellectual portable fourth generational handheld analyzer-Genius XRF series, which can satisfy the market requirements and possess independent intellectual property rights.

The new generational Genius XRF series are designed according to the applications of on-site X-ray analysis in the wild, featuring small and light body, which can be held in hands by common people when measuring. It is super small, super light, super beautiful, super safe, super convenient, super long standby time, super waterproof, super precise and super fast. Digital multi-channel technology make the instrument have better detection limit, better stability, and wider application fields.

Products include RoHS analyzer G3003XRF, alloy analyzer G3005XRF, mineral analyzer G3007XRF, and heavy metals in soil analyzer G3009XRF, which can be applied for in-situ material testing, for on-site on-line analysis of various elements during the process from manufacturing control to finished product testing, for quick identification of alloy number and reliable authentication, for on-site heavy metals testing in soil, and for various kinds of geological and ore samples on-site analysis of multi-elements.

This series of products has passed strict testing and inspection, and all indexes are accorded with the related technological requirements, reaching the international advanced level. Products have been sold both home and abroad in batch, getting favourable comments from customers, breaking the monopoly of foreign manufacturers. **Performance Advantage** Perfect performance as

desktopIntroducing three core technology of small power window integrated miniature X-ray tube, large dimension beryllium window electric-cooling SDD detector(the best detector in the world), and miniature digital signal multi-channel processor, greatly reduce the testing time and test deviation,and improve the detection precision, which make it have the similar performance as the desktop.

Small body , easy to carry and operateSmall body.Easy to carry. Convenient for wild work. Can operate on-site and in-situ analysis at anytime or anywhere.

Nondestructive detectionNo destruction to samples

Fast detectionInstrument not only can operate fast detection with handheld type within 1-2 seconds, but also can operate longtime precise dedection with desktop type, having the similar precision as the laboratory detection after 10 seconds.

Newly added light elements detection functionCompared to handheld X-ray fluorescence analyzer of the third generation,it is added the gas charging system, which can charge helium at ordinary pressure.Thus it can detect the elements from Mg, greatly expanded the detecting range of elements, satisfying the requirements of customers according to light elements detection.

Direct testingIt can detect the analytes directly, no need of smaples. It can analyse various kinds of samples, including electronic products, alloy samples, geological and mining, soil, rock, residues, small solid particles, liquid sediments etc.

HD camera, more accurate testingBuilt-in HD camera, can observe the testing position at any time, which is very important of mineral smaple testing.

Easy for calibration of deviationMulti-testing modes installation and free adding of infinite modes,coordinating with automatic testing mode matching function, it achieves the esay test for one key. Built-in intensify calibration methods, it can calibrate the deviation caused by different geometry shapes and inhomogeneous structure density.

Professional software, easy to operateRoHS elements analyzer, alloy analyzer, mineral analyzer , and heavy metals in soil analyzer all are installed with professional software.Brand new software interface and core, combined FP with EC, it has wider application fields.

The collimator filter, improving 3 times of efficiencyOn the basis of the combination of collimator and filter, increase them from 4 groups to 12 groups, increasing 3 times.

Faster data transmissionEmbedded Window CE system, HD touch screen (resolution 640*480), digital multi-channel technology, and SPI data transmission, effectively improve the data transmission ability and counting ability, mastering testing data in every environment.

Radiation protection, care for health Triple safety protection function, automatic sensation, automatically shut-down of X light pipe within 2 seconds with no sample in testing; The radiation level is far lower than the international safety standard when working, with no radiation leakage; accompanied with test safety cover.

Strong power, convenient to charge Lithium battery, with maximum capacity of 7800mAH, can continuously work for 8 hours, whose endurance are 2 times longer compared to last three generations. And equip with wide voltage ac charger or vehicular charger, which ensure the test at any place or any time.

Warning instructions prevent for mistaken operation Equipped with warning instruction system, green light flashes when the power is on and the yellow light flashed when testing, which prevent for mistaken operation.

Multiple protection and durable The instrument has waterproof and dustproof function and can continuously work under high temperature and humidity. Its protection boxes are manufactured with high strength military material, which enjoy with well moistureproof, shockproof, and pressure resistant functions.

Performance index

1. Model: The 4th generation EDX analyzer-Genius XRF series. 2. Analysis method: Energy dispersive X-ray fluorescence analysis method. 3. Measuring range of elements: Mg to U. 4. Simultaneously detect elements: Simultaneously detect tens of elements. 5. Processor and RAM: CUP: 667MHz, RAM: 256M, Maximum expanded storage: 32G, Standard configuration: 2G, can store large amounts of data. 6. Content range: ppm ~ 99.99%. 7. Testing time: 3-30 seconds. 8. GPS, WIFI: Built-in system. 9. Battery time: Lithium battery, which can be charged, with maximum capacity of 7800mAH, can continuously work for 8 hours; Equipped with wide voltage (110V-220V) general adapter, can work under alternating current. 10. Testing object: Solid, liquid, powder. 11. Detector: 25mm 20.3mil, SDD detector. 12. Detector resolution: Lowest resolution can be 139eV. 13. Excitation source: 40KV/100uA-Ag anode window miniature X light tube and high voltage source. 14. Collimator and filter: Collimator of 4.0 or 2.0 diameter, automatic switch of 6 types filter groups. 12 kinds of groups, world's most compound mode, can satisfy various kinds of samples testing. 15. Video system: HD camera. 16. Screen: TFT-LCD touch screen, resolution 640*480. 17. Detection limit: Lowest detection limit accounts to ppm level. 18. Testing window: 12mm. 19. Safety: Self-contained password manager mode. 20. Gas charging system: Helium charging at ordinary pressure system. 21. Data transmission: Digital multi-channel technology, SPI data transmission, quick analysis, high counting rate, waterproof miniature USB, which can be connected to desktop computer. 22. Humidity: ≤90%. 23. Temperature: -20°C ~ +50°C. 24. Size: 234×306×82mm (L×H×W) . 25. Weight: 1.9Kg (with battery) , 1.6Kg (without battery).

G3003 XRF

The instrument is widely used in toy safety testing, electrical and electronic and RoHS testing etc.

