

XRF-K5 precious metal analyzer is an X-ray fluorescence spectrometer made by CFAN Instrument and which can be widely used in jewelry recycling, jewelry factories, hallmarking center, banks and other industries. The instrument embedded with IPS display and capacitive touchscreen, adopt the USA customized Si-pin detector, built-in Intel i3 ten-core CPU industrial computer, adopts 45 degree optical system and newest smart FP algorithm, the test of analyzer is fast, stable and accurate and high cost performance.



Specifications

- Input Voltage: AC100 ~ 240V, 50Hz
- Package size: 566mmx531mmx560mm
- Machine size: 420mmx350mmx300mm
- Test chamber size: 297x294x80mm
- Rated power: 150W
- Gross weight: 44KG
- Net weight: 32KG
- Noise: <50dB
- Operating environment:
Temperature: 15°C ~ 31°C
Humidity: <70% (Noncondensing)

Features

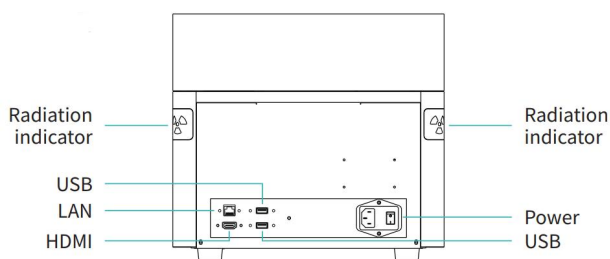
- Analysis elements : K(No.19) ~ U(No.92)
- Max up to 30 elements could be analyzed at the same time
- Analysis range: 0.010% ~ 99.999%
- Test Precision: $\pm 0.03\%$ (9999 gold)
- Test sample : Precious metal alloy
- Customized TCP/IP protocol API interface, support for extranet control of devices, status monitoring and data collection
- Supporting multi-point continuous test, high test efficiency
- Software interface is simple and intuitive, supports a variety of customized reports

Core Components

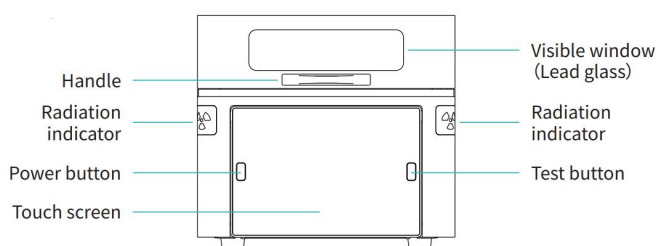
- Detector: AMPTEK customized Si-PIN
 - Detector area : 6mm^2
 - Resolution : $145 \pm 5\text{eV}$
- Built-in industrial pc : Intel i3 ten-core + win11 system
- HV power supply: 50KV/1mA digital HV
- X-ray tube: 50KV/1mA
 - Window material : glass window
 - Target material: wolfram
 - Focus: $\phi 0.5\text{mm}$
- Collimator: $\phi 2.5\text{mm}$

Hardware Interface

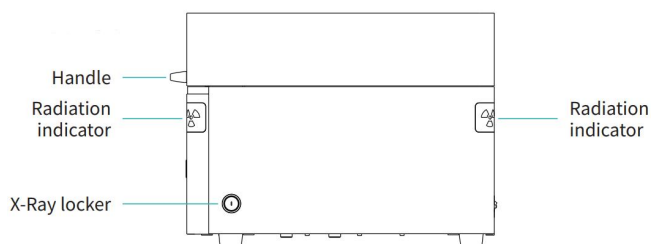
Back



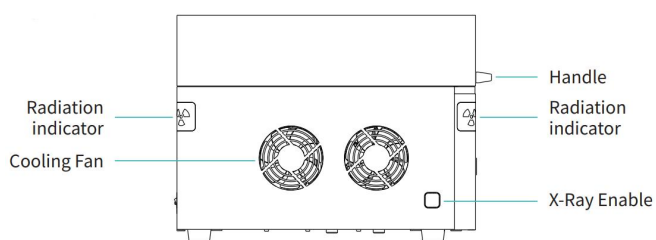
Front



Right



Left

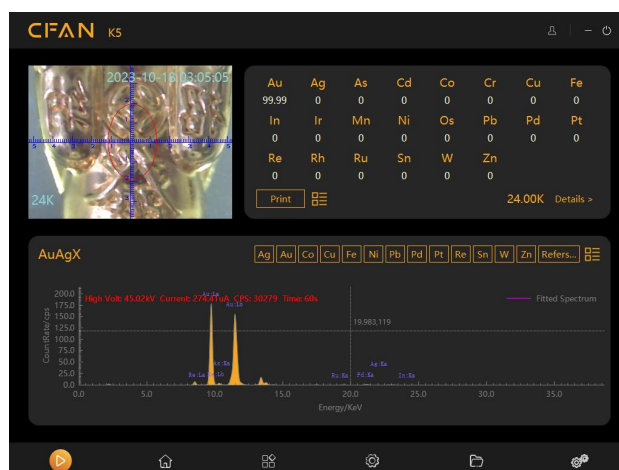


Software Interface

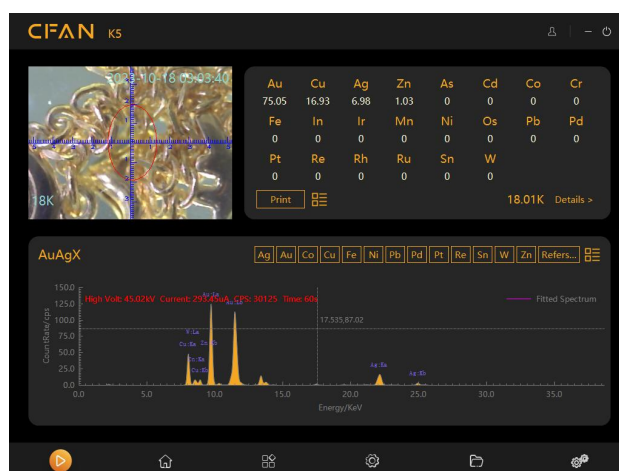
Refer to 《XRF-K5 communication protocol》 manual.

Test Case

● 24K Gold



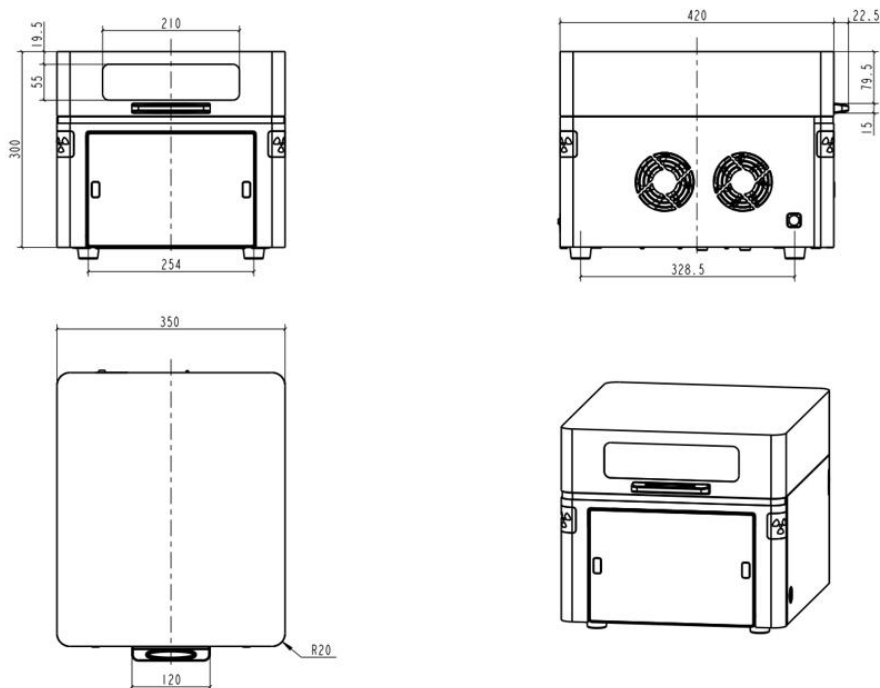
● 18K Gold



● 14K Gold



Product Size Drawing



Maintenance

- XRF-K5 needs to be placed a dry and normal temperature environment, if you don' t use for a long time, please unplug the power plug and cover the machine with a dust cover.
- If there is any visible dirt on the metal plate of the machine out-shell, clean it with a diluted neutral detergent and a soft cloth, and then wipe off the moisture with a dry cloth.(Don' t use the alcohol for cleaning).
- There is an x-ray lock on the back of the machine, please make sure to operate in the allowed position when using.
- Preheating 5 minutes for the first time starting machine everyday, do not cancel the preheat process unless it is emergency.
- If you don' t use it for a long time, it' s necessary for you to turn on the machine to test any sample for half an hour every week to keep the x-ray tube dry.

Cautions

- The X-ray is still in the excited state during the test or after the test is completed, if the lid is opened during the test, the system will automatically cut off the X-Ray; if the lid is opened after the test is completed, the system will shield the X-ray to ensure radiation safety.
- Suddenly power failure of the host may cause the loss the files of the built-in industrial computer of the machine, make sure to use UPS, and make sure to close the software before turning off the power of the machine.
- The sample support film can prevent dust from entering the inside of the instrument, it should be replaced in time if there is any damage.
- The standard test duration is 60 seconds, and the data stability is slightly worse at 30 seconds, depending on the customer' s choice.