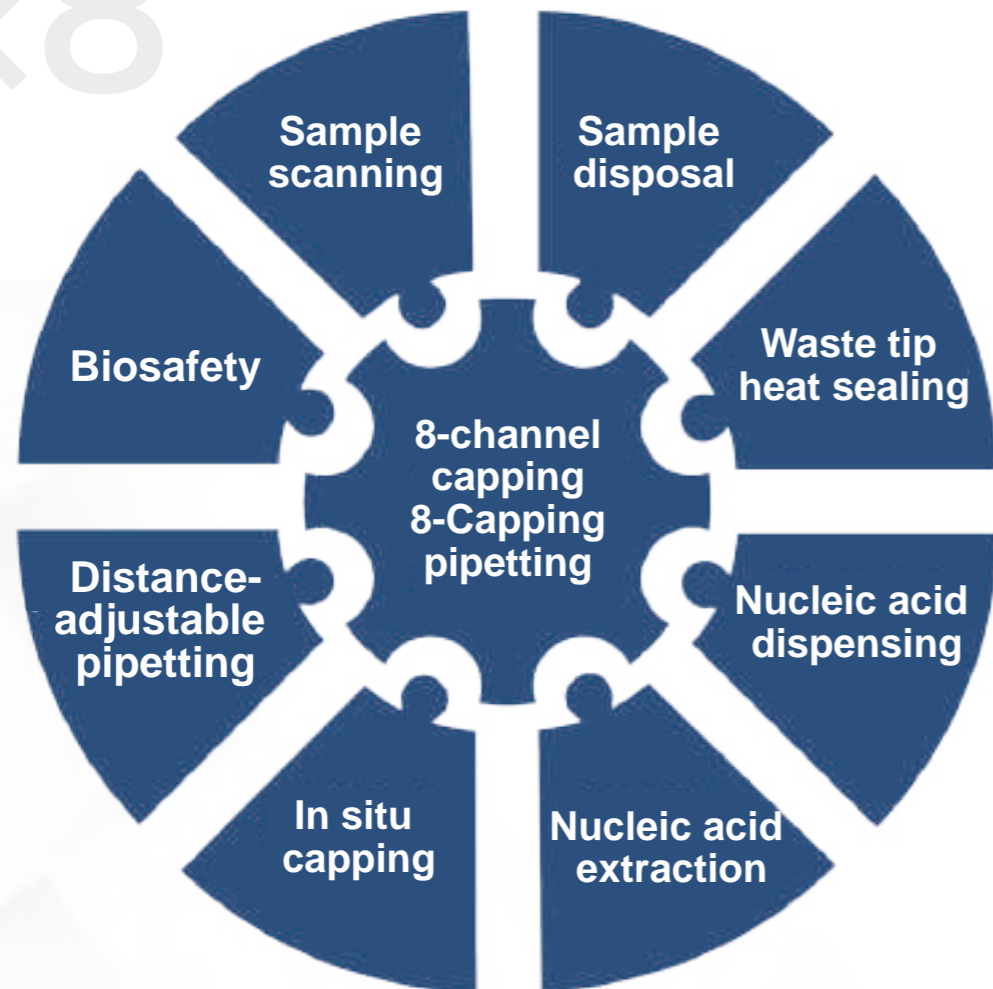


■ The automatic capping and sample transfer process achieves a technological leap of 8-channels at a time, with the efficiency increased by 800%, which truly achieves the delicate integration of safety and efficiency.

**YOCON 友康®**  
More convenient and economical

National Unified Service Number  
**010-5871 1655**

8x8



Automatic nucleic acid  
sample processing and  
isolation workstation

Product brochure

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Yocon Biology  
Public Account



Yocon Biology  
WeChat



Complete isolation  
within 20 minutes with  
the Yocon three-step  
extraction reagent



The nucleic acid is  
isolated once the  
original tube is  
positioned



Biosafety

**8 channels integrated**



**6 product patents, 4 software copyrights,  
and core independent intellectual property rights**

## About product

FE4800 automatic nucleic acid sample processing and isolation workstation is a simple, high-precision, efficient, safe and reliable automatic nucleic acid isolation and purification instrument. With the Yocon three-step extraction kit, the workstation can isolate 48 samples within 20 minutes, and harvest 3,456 nucleic acid samples every day. 8 channels run simultaneously during the automatic capping, and sample and reagent transfer, with the efficiency increased by 8 times compared with similar single processing equipment in the market.

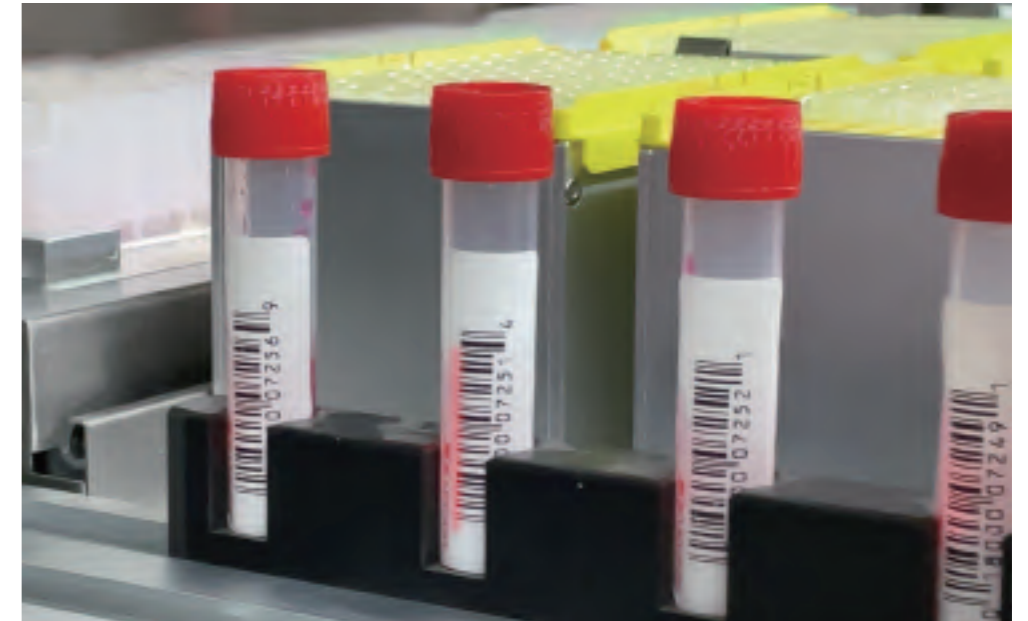
# FE4800



Advantage 3

Sample traceability

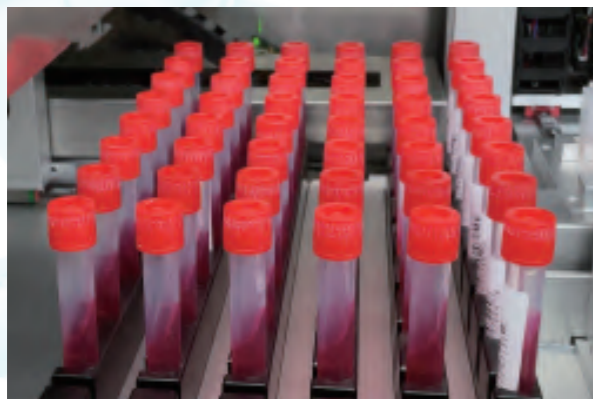
After the sample is loaded, the in-situ vortex vibration program is activated, and the frequency and time can be adjusted to fully release the sample and improve the detection rate. After the vibration is completed, it is automatically positioned and locked to avoid subsequent extraction accidents caused by displacement of the sampling tube.



Advantage 1

Original tube onboard

The virus sampling tube can be directly loaded on the machine without manual pre-dispensing. The nucleic acid is isolated once the original tube is positioned so that the unattended automation is truly realized.



Advantage 2

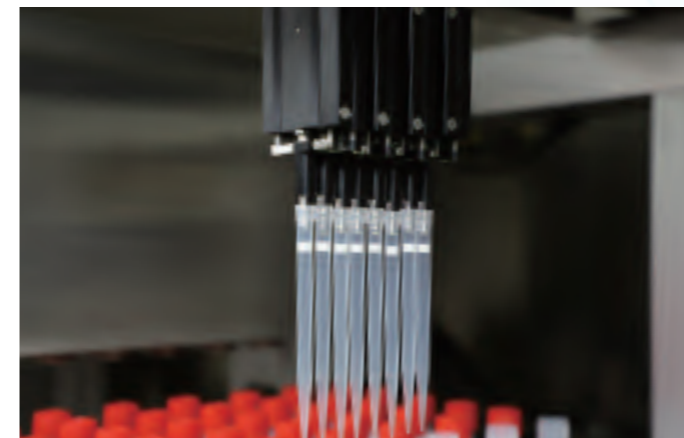
Automatic vibration

After the sample is loaded, the in-situ vortex vibration program is activated, and the frequency and time can be adjusted to fully release the sample and improve the detection rate. After the vibration is completed, it is automatically positioned and locked to avoid subsequent extraction accidents caused by displacement of the sampling tube.

Advantage 4

Distance-adjustable pipetting

The pipetting distance can be automatically adjusted according to the distance between sampling tubes, making the open consumables possible. Yocon guarantees lower usage costs for customers by its higher investment.





**Advantage 5** 8-channel capping

The creative automatic capping arm can uncap or cap 8 sampling tube caps at the same time. The real sample processing efficiency is represented by the number of samples processed at one time rather than the number of channels.



**Advantage 6** B2 Biosafety

A B2 negative-pressure full-exhaust biosafety cabinet operating environment is equipped to prevent sample leakage, prevent false positives caused by aerosol pollution, and comprehensively ensure the safety of operators. The equipment can operate normally both inside and outside the clean room, without mandatory requirement for the external environment.

**Advantage 7** Intelligent early warning

There are many built-in sensors. In case of accidental operation, displacement of consumables, and mistakenly taking air bubbles when pipetting reagents, the corresponding sensor data will be abnormal.



**Advantage 8** Remote control

The main board IPC advanced control system and the screen constitute an automatic control module, by which the user can view the extraction process at any time and perform touch screen control precisely with one finger. Yocon will develop a workstation mobile APP to form a more user-friendly automatic interactive system. Then the users can view and remotely control the extraction process at any time by the mobile phone, allowing users to accurately control the device even outside the scope of the device.



**Advantage 9 Customization program**

The extraction program supports customization, and both inactivated and non-inactivated sampling tubes can be used.



**Advantage 10 Rapid mode**

With the Yocon inactivated virus sampling tube and the Yocon three-step extraction reagent, it only takes 20 minutes to extract nucleic acids from 48 individuals.



**Advantage 11 Standard mode**

It only takes 40 minutes to extract nucleic acid from 48 individuals by using Yocon non-inactivated sampling tubes or sampling tubes of other brand, in conjunction with Yocon five-step nucleic acid extraction reagent or extraction reagents of other brand.

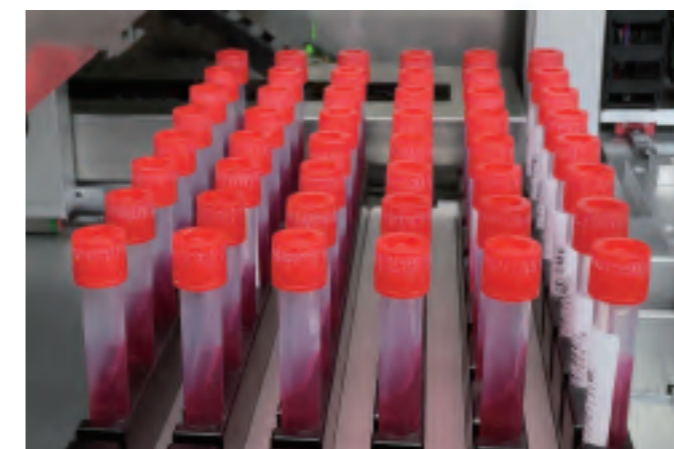
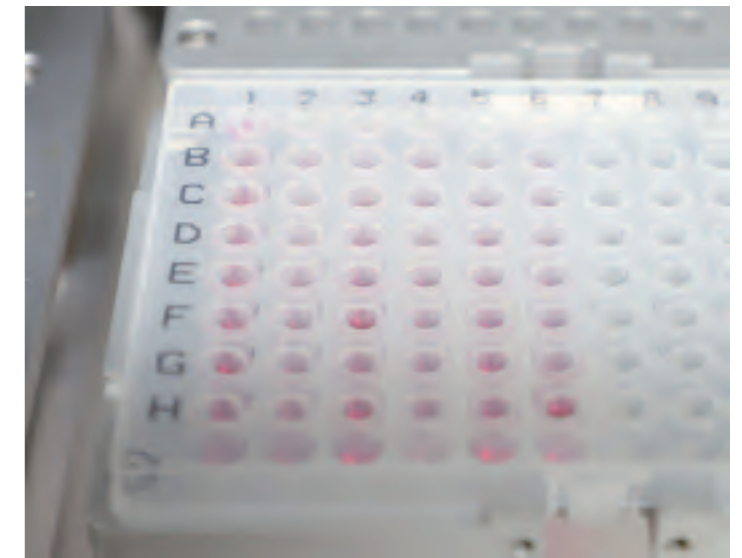


**Advantage 13 Unattended**

The equipment runs fully automatically without manual intervention which can avoid manual operation errors and ensure more accurate test results.

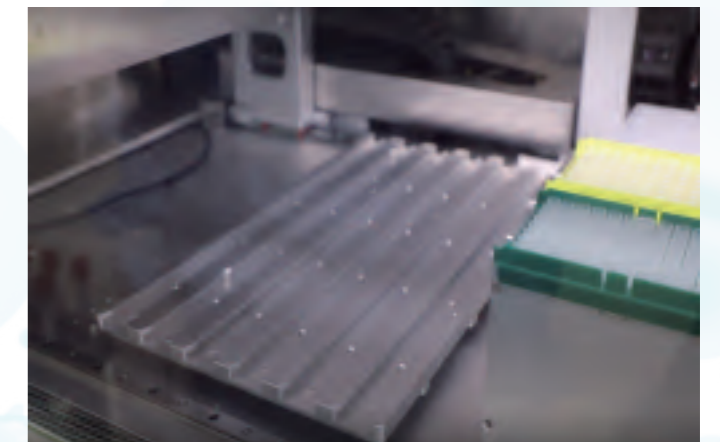
**Advantage 12 Automatic dispensing**

After the nucleic acid isolation is completed, samples are automatically dispensed into 96-well plates, which is convenient for the nucleic acid test in the next step.



**Advantage 14 Open reagents and consumables**

Compatible with all octagonal base sampling tubes and nucleic acid extraction reagents on the market. You will have a freer operating experience since there is no bundled or forced sales.



## Product technical parameters

Disposal step	Function	Technical parameters
Sample disposal	Sample on and off machine forms	Original sampling tube onboard
	Number of tubes capped at the same time	1- 8 sample tube caps
	Sampling tube capping form	In situ capping
	Sample data recording form	Automatically scan the barcode on the tube wall and save at the same time
	Sample rack in-position inspection	Automatically test to prevent displacement
	Vortex module positioning	Automatic positioning and locking after vibration by vortex
	Virus sample release form	In situ vortex vibration with adjustable frequency and time
Flexibility and speed of nucleic acid isolation	Nucleic acid isolation time in rapid mode (Yocon Reagent)	48 samples/20 minutes
	Nucleic acid isolation time in standard mode (other reagent)	48 samples/40 minutes
	Maximum number of samples processed in a single cycle	48 samples
	Minimum number of samples processed in a single cycle	1 sample
	Isolation steps can be edited	Program editing is available
Anti-error design in unattended mode	Anti-capping failure design	Position sensor can detect that the rack is in position
	Anti-pipette collision design	Color sensor can detect that the tube cap is uncapped
	Anti-tip uninstalled design	TIP position sensor can detect that the tip is loaded correctly
	Anti-liquid not pipetted design	Air pressure sensor can detect contact to the liquid
	Error hint	Screen display, device indicator light flashing, and beeper alarm
Sample transfer	Volume of liquid transferred at the same time	8 channels
	Can the pipetting distance be adjusted?	The pipetting distance can be intelligently adjusted according to the tube distance
	Volume range pipetted per channel	20uL~1000uL
	Pipetting precision	20uL, < 1.5%; 100uL, < 0.5%
Nucleic acid extraction	Nucleic acid extraction method	Magnetic bead method for nucleic acid extraction
	Nucleic acid extraction heating module	Available, room temperature~100°C
	Upper magnetic bar holder	High-efficiency extraction by upper magnetic method

Disposal step	Function	Technical parameters
Nucleic acid extraction	Mix by shaking	Adjustable according to liquid volume
	Temperature safety module	Equipped with both temperature sensor and temperature protection
	Temperature control range of nucleic acid extraction heating module	±0.5 C
Nucleic acid transfer	Nucleic acid transfer method	Automatic transfer to PCR plate
Biosafety	The whole workstation is in a negative-pressure working environment	Equivalent to a B2 biosafety cabinet
	Anti-drip system	Move under the pipette in real time
	Sterilization of the operating environment	High-efficiency UV lamp
Waste heat seal	Waste heat sealing	Automatic
Supporting reagent	Virus sampling tube	Open octagonal base sampling tube
	Nucleic acid extraction reagent	Open
Supporting consumables	Pipette tip	Standard pipette tips, 1000 ul and 50 ul
	Deep-well plate	Standard
	96-well or 48-well PCR plate	Standard
Control parameter	Technical mode	High-performance industrial control computer
	Supporting program	Upper computer software
	Control mode	Touch screen
	Display	12.1-inch 7k screen
	Resolution	1024×768
	Interface mode	Data export, docking with LIS system, remote control
General parameters	Working temperature	10~30 C
	Working humidity	<80%, no condensation
	Dimensions	1600mm(W)×880mm(D)×1950mm(H)
	Voltage, power	220V, 50Hz, 1600W
	Weight	490kg