JX Series

Motor-Driven 3D Measurement Videoscope

JX series 3D measurement videoscoe is with motor-driven joystick, 360° articluation, which was independently developed. Featured with the function of fast and high-precision global scanning, it can realize 3D cloud image modeling and 3D measurement, which represents that we have entered the top ranks of the international endoscope technology.





1. 7" intelligent touch screen
2. 3D measurement, accuracy≥95%
3. High precision and fast global scanning 3D cloud image
4. Selection of automatic identification circle of defects
5. Step-regulation, precise positioning
6. MDI report generation
7. graffit / watermark / annotation
8. Compatible with different tubes from 1mm to 8mm
9. Comparative measurement











Monitor System

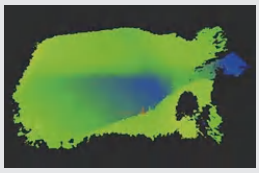
Display	7 inches touch screen
Camera Pixels	1,000,000/ 640,000/300,000
Display Resolution	1920 x 1080/1280 x 720/640 x 480
Image/Video format	JPG/MP4
Working time	4 hours，7.4V/6400mAH*1
Weight	about 2.3kg（Including battery weight）
Data port	HDMI video output /SD slot /USB port

Tube System

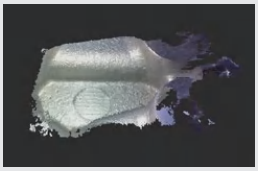
Probe （mm）	1.0 /1.8/ 2.2 /2.8 | 3.8/ 6.0/ 8.0
Tube Length（m）	1.5/2.0/3.0/10.0（customized for other length）
Articulation	360°articulation，180°bending angle
View	Front view/Side view/ Front&side View
DOF	10-100mm/20-200mm/3-25mm
Light Source	LED/Optic fiber
Compatibility	Modular design, compatible with different tube systems



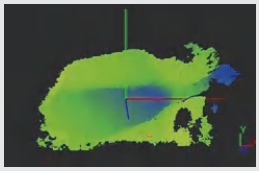
sectional view



Vertical depth nephogram



3D physical cloud image



XYZ coordinate

High precision and fast global scanning 3D cloud image

- Fast global scanning to view 3D physical cloud image
- Vertical depth cloud map, automatic measurement of maximum depth
- 3D cloud image XYZ coordinate display, arbitrary section view, easy to locate
- locate the depth and height difference of internal defects
- MTD arbitrary point depth value

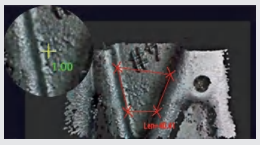


Measurement area





Point to line distance

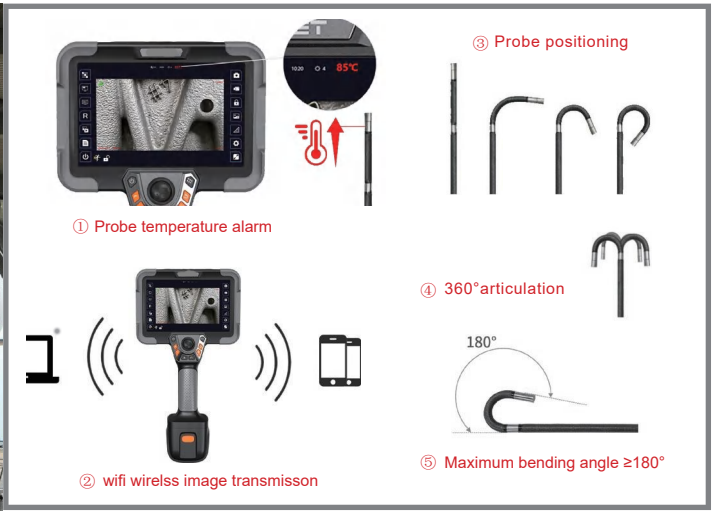


Confidence assisted point

3D measurement，measurement accuracy ≥ 95%

- Point to point, point to line, polyline, area, depth and other measurement methods
- Measurement accuracy ≥ 95%
- Standard accuracy：0.1mm,minimum accuracy:0.01mm
- Fine tuning navigation keys and window assistance, fine tuning point selection, confidence assisted point selection, to achieve accurate measurement
- Support repeated measurement





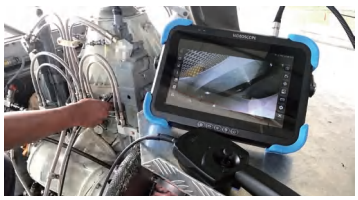
F Series
3D Measurement Videoscope

F series is a videoscope model with 3D measurement function developed. It is available with different measurement modes, such as point to point, point to line, multi-segment lines, depth, etc. The measurement accuracy can be reach to 95%. it is compatible with interchangeable tubes from 1.0mm to 8.0mm, as well as different probe tip, including front view/ side view/ front view& side view dual-camera, which can meet all kinds of inspection requirements.



1. 10.1" touch screen
2. Super high definition image
3. 3D measurement lens
4. Accurate measurement
5. Front view/ side view image switch
6. Super bright light, maximum illuminance: 100,000Lx







Monitor system

Display	10.1" touch screen
Camera pixels	1,000,000/ 640,000/ 300,000
Image Resol	1920 x 1080/1280 x 720/640 x 480
Image/Video format	JPG/MP4
Working time	2.5 hours，3.7V/3200mA*4
Weight	about 2.95kg
Data port	HDMI video output /SD slot/micro USB /Air plug

Tube system

Probe (mm)	1.0/1.8/2.2/2.8 |3.8/6.0/8.0(support measurement)
Tube length(m)	1.5/2.0/3.0/10.0（customized for other length）
Articulation	360°articulation, 180°bending angle
View	front view/side view/front&side view
DOF	10-100mm/20-200mm/3-25mm
Light source	LED/Optic fiber
Compatibility	Modular design, compatible with different tube

K Series
Motor-Driven Videoscope

K series is an motor-driven videoscope, with powerful articulating-guide functions, including fast/ slow articulation control, 360°all-way articulation and 180°large bending angle, one click probe lock or reset, probe step-regulating and positioning.

Camera with 300,000 / 1,000,000 / 2,000,000 pixels. Gun-style button for taking photo and video. It can capture image during video recording.



1. 360°motor-driven articulation, fast/slow model, auto reset of probe tip
2. Lock the probe with a button click, step-regulating articulation
3. Compatible with white light, ultraviolet light, infrared light and other multi-light sources
4. WiFi image transmission
5. Support mouse and keyboard connection
6. Earphone/ voice recording
7. Comparative measurement
8. Automatic defect recognition

Monitor system

Display	5.7" HD touch screen
Pixels	2 mega/1 mega /640,000/300,000/160,000
Image resoulation	1920x1080/1280x720/640x480
Iamge/Video forma	PNG/MP4
Working time	4 hours
Weight	about 2.0kg
Data port	HDMI /TF card slot/ USB port

Tube system

Probe diameter	1.0/1.8/2.2/2.8/3.8/4.2/6.0/8.0mm
Tube length(m)	1.5/2.0/3.0/10（customized for other length）
Articulation	360°articulation，180°bending angle
View	front view/side view/ front&side view
DOF	10-100mm/20-200mm/3-25mm
Light source	LED/Optic fiber
Compatibilty	Modular design,compatible with different tube

TS Series

Handheld Measurement Videoscope

TS series is a handheld measurement videoscope with 5.5” HD touch screen and 3D measurement probe. It is compatible with insertion tube from 1mm to 8mm, for narrow space inspection and defect measurement.



1. Handheld integrated design
2. Multiple 3D measurement modes
3. Fine tuning navigation keys
4. Graffiti, annotation, defect mark
5. Negative film function
6. Modular design



Simple menu, convenient and fast operation



3.8mm front view/side view
6.0mm front view/side view



interchangeable tubes with different diameter

Monitor system

Display	5.5" touch screen
Camera pixels	1,000,000/300,000 pixels
Image resolution	1280 x 720/640 x 480
Image/video format	JPG/MP4
Working time	3.5 hours，3.7V/3200mAH*2
Weight	about 0.9kg
Data port	HDMI/TF card slot /USB port

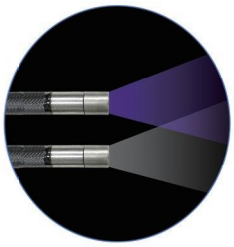
Tube system

Probe (mm)	1.0/1.8/2.2/2.8 ｜ 3.8/6.0/8.0(support measurement)
Tube length(m)	1.5/2.0/3.0/10.0（customized for other length）
Articulation	360° articulation, 180° bending angle
View	front view/side view/ front&side view
DOF	10-100mm/20-200mm/3-25mm
Light source	LED/Optic fiber
Compatibilty	Modular design, compatible with different tube

TU Series
UV HD Videoscope

TU series UV videoscope adopts module design, which the display and tube can be dismantled by one button. It is compatible with insertion tubes of different diameter or length. UV and white light source is switched by one button. With intelligent image processing system, it is available with multiple functions, such as exposure control, image negative film, in order to meet various and complicated inspection requirements.





1. 360°joystick control articulation
2. Dual light source
3. Fast switch UV/ white light
4. Super long working time
5. 1280x960 display resolution
6. HDMI non destructive output



Monitor system

Display	5.1"
Camera pixels	1,000,000 pixels
Image resolution	1280 x 720
Image/Video format	JPEG/MOV
Working time	8 hours，3.7V/3200mAh×2
Weight	about 0.8kg
Data port	HDMI video output, micro USB port

Tube system

Probe (mm)	3.8/6.0/8.0
Tube length(m)	1.0/1.5/3.0（customized for other length）
Articulation	360°articulation，maximum 190°bending angle
View	Front view/ Side view
DOF	0mm-100mm/5 mm-50mm
Light	UV /white /UV+white light
Compatibility	Modular design,compatiable with different tube

TA Series
HD Autofocus Videoscope

TA series is an innovative auto-focus borescope with ATC driving motor, which can realize the focus range of 40mm- ∞. it can meet the inspection requirements on different distances and reduce user's cost, as well as enhance the inspection efficiency, which are widely used in the detection of cylinders and containers.

1. AF infinite autofocus
2. 360° all way articulation
3. Touch+physical button operation
4. New de-noise/exposure algorithm
5. Damping type positioning design
6. Deadial graffiti mark





AF infinite autofocus

Monitor system

Display	5.5" touch screen
Pixels	One mega pixels
Image resoulation	1280x720
Iamge/Video format	JPEG/MOV
Working time	4 hours, 3.7V/3200mAH*2
Weight	0.9kg
Data port	HDMI video ouput/ Micro USB port

Tube system

Probe diameter(m)	12.0±0.5
Tube length (m)	1.5/3.0/5.0/10.0 (customized for other length)
Articulation	360°articulation，190°bending angle
View	Front view
DOF	40mm-∞
Light source	LED
Probe position	Damp positioning,tightly locking device

THG Series
Container Inspection Videoscope

THG series container inspection videoscope adopts low light-sensitive image sensor and LED light of 150,000+ Lux, to meet the requirements on inspecting large cavity and bending pipes.

1. low light-sensitive image sensor
2. spring tube with push rod
3. 360°articulation, flexible tube
4. damping poistion design
5. optional stretchable support pole
6. special for heat-exchanging tube and boiler inspection



- Design for big containers



Monitor system

Display	3.5" all sight screen
Pixel	1,000,000
Image resolution	1280×720
Image/Video format	JPEG/MOV
Working time	about 8 hours
Weight	about 0.55kg
Data port	HDMI video output、Micro USB port

Tube system

Probe (mm)	19.0
Tube length(m)	1.5m/3.0m/5.0m（customized for other length）
Articulation	360°articulation，maximum 190°bending angle
View	Front view
DOF	50mm-∞
Light source	LED
Compatibility	Modular design,compatiable with different tube

T51X Series
HD Industrial Videoscope

T51X series is an industrial videoscope with module design, which the display and tube can be easily dismantled and replaced. Compatible with different tubes from 1mm to 8mm, and front view / side view/ dual-camera probes. It is a classic and most popular borescope model.

1. 360° precision articulation
2. 10m+long distance transmission
3. 10m+ long insertion tube
4. Exposure suppression/compensation
5. Comparative Measurement
6. Innovative design of dual- battery power supply



● Module design, interchange display and tube



3.5" 5.1" Φ6.0mm Φ3.8mm Φ2.2mm Φ1.8mm

Monitor system

Display	5.1" / 3.5" (optional)
Pixels	1,000,000 /300,000
Image resolution	1280×720/400×400
Image/video format	JPEG/MOV
Working time	8 hours, 3.7V/3200mAH*2
Weight	≤0.8Kg
Data port	HDMI video output /micro USB port

Tube system

Probe diameter(mm)	1.8/2.2/2.8/3.8/6.0/8.0
Tube length(m)	1.5/3.0/5.0/10.0（customized for other length）
Articulation	360°articulation，180°bending angle
View	Front view/ Side view/ Front&side view
DOF	10-100mm/20-120mm/3-25mm
Light source	LED/ Optic fiber
Compatibility	Modular design, compatibile with different tube

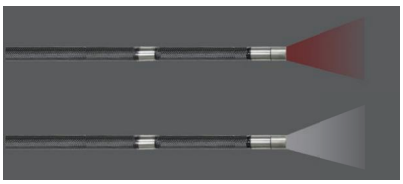


TJ Series
Police IR Videoscope

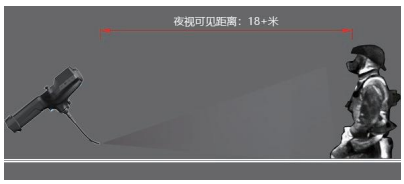
TJ series IR videoscope is compatibe with IR& white dual light sources, long distance image transmission technology and 18M+ night vision distance . It is special for police use, like security checking, anti-terrorism, search and rescue, explosion detecting, etc.

1. IR/White light, one key toggle
2. 18m+ IR long night viewing distance
3. Original dual battery design
4. 3.5"/5.7" display
5. WIFI&RF wireless image transmission
6. Authoritative testing by MPS

● IR/White light, one key toggle



● Night vision distance ≥ 18M





Monitor system

Display	3.5"/5.7"
Camera pixels	1,000,000/450,000/300,000
Image resolution	1920×1080/1280×720/640 x 480
Image/Video format	JPEG/MOV
Working time	≥8hours，3.7V/3200mAh*2
Weight	≤0.8kg
Data port	HDMI video ouput、micro USB port

Tube system

Probe (mm)	1.8/2.2/2.8/3.8/6.0
Tube length(m)	1.5/3.0/5.0/10.0（customized for other length）
Articulation	360°articulation，maximum 190°bending angle
View	Front view
DOF	20mm-∞/10-100mm/50mm-∞
Light source	IR/white/white+IR dual light，one key toggle
Compatibility	Modular design, compatible with different tube



T35H Series Videoscope

T35H series flexible videoscope adopts handheld design, with detachable display and insertion tube. It is compatible with 3.8mm/4.2mm/6mm/8mm probes, available tube length from 1M to 5M. Dual- battery power supply, working time ≥ 8 hours.



1. Precise probe positioning
2. Compatible with different tube system
3. Support HD video recording
4. 720P image resoluation
5. 4X zooming defect recognition
6. Cross ruler comparative measurement







• 360° steering



• Damping position bending

Monitor system

Display	3.5" /5.1"（optional）
Camera pixels	1,000,000
Image resolution	1280×720
Image/Video format	JPEG/MOV
Working time	about 8 hours, 3.7V/3200mAh*2
Weight	about 0.55kg
Data port	HDMI video ouput, USB port

Tube system

Probe (mm)	3.8/4.2/6.0/8.0
Tube length (m)	1.0/1.5/2.0/3.0（customized for other length）
Articulation	360° all way, maximum 190°bending angle
View	Front view/ Side view
DOF	5-50mm/10-100mm/20-120mm
Light source	LED/Optic fiber
Compatibility	Modular design, compatible with different tube

D Series
Online Inspection Videoscope

D series online inspection industrial videoscope is an infinitely expanded and super compatible model developed. .With 13.3” touch display, high definition image sensor, intelligent image processing system, and compatible with different insertion tube system, it is widely used for online inspection, such as the detection of the inner cavity of the casting or runner, pump body, pipelines, hydraulic valve blocks and other defects.







1. 13.3" touch screen
2. One mega pixels
3. Negative film
4. Rigid tube/ flexible tube for option
5. Picture in picture
6. Defect annotation

Monitor system

Display	13.3" touch screen
Pixels	1,000,000 /450,000
Image resoulation	1280 x 720/640 x 480
Image/video format	JPEG/MP4
Working time	plug-in
Weight	About 2kg
Data port	HDMI video ouput /SD card slot /USB port

Tube system

Probe diameter(mm)	1.8/2.2/2.8/3.8/6.0/8.0
Tube system(m)	1.0/2.0（customized for other length）
Articulation	flexible tube can be articulated
View	can be customized
DOF	3-50mm/10-100mm/20-150mm
Light source	LED/Optic fiber
Compatibility	rigid tube/ flexible tube

S Series
Tool Videoscope

S series tool videoscope is an affordable product for car after market and maintenance market. with 3.5” IPS display, joystick articulating handle and handheld design, it is easy to operate and carry.

1. 360° probe articulation
2. 220° large bending angle
3. sapphire glass lens
4. Mega HD Image
5. IP67 waterproof and dustproof
6. temperature alarm
7. wireless image transmission
8. weight is only 0.5KG









Monitor system

Monitor	3.5 inches IPS HD full-view display
Pixels	One mega pixels
Image resolution	1280x720
Image/Video forma	JPEG/MP4
Working time	3 hours，3.7V/3200mAh / 9hours（optional）
Weight	about 0.5kg
Data port	HDMI video output/TF card slot /USB port

Tube system

Probe diameter(mm)	4.0/6.0
Tube length (m)	1.0/1.5
Articulation	360°articulation，maximum 220°bending angle
View	Front view
DOF	7-110mm/20-150mm
Light source	LED
Optional	WIFI function / temperature alarm

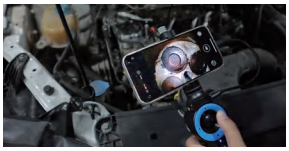
QT360

All-way Articulation Videoscope

QT360 series USB borescope is with 360°all-way articulation, and compatible with IOS and android system. It has the function of temperature alarm and testing report generation, which is widely applied in the car aftermarket, for inspecting evaporation boxes, burning rooms, ternary catalysts, as well as narrow spaces and pipelines that are difficult to enter or detect.

1. 360° accurate articulation
2. Compatible with Android and IOS system
3. Mega-pixel camera
4. One click to take photos and video
5. High temperature alarm function
6. Testing report generation





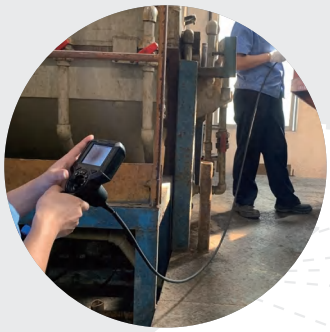
Monitor system

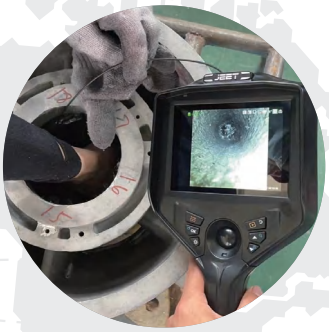
Display	Compatible with different smart devices
Camera pixels	1,000,000
Image resolution	1280x720/960x720
Image/Video format	JPG/MP4
Working time	120min，2600mAh
Weight	0.3kg
Data port	USB port

Tube system

Probe(mm)	6.0±0.2
Tube length (m)	1.0
Articulation	360°articulation, 210°bending angle
View	Front view
DOF	20mm-∞
Light source	LED
Compatibility	Android/IOS/windows/harmony system

Ultra Fine & Long Distance Borescope Customization

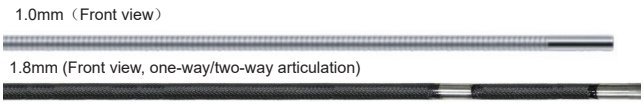




- Customize ultra-fine videoscope:

We can customize 1.0mm/ 1.8mm videoscope, with front view/ side view probe, one-way/ two-way articulation, breaking through the technical bottleneck of only front view probe or one-way articulation on 1.8mm videoscope model.

Adopting 160,000 pixel camera and HD display and tungsten-braided wear-resistant insertion tube, it is available for detecting narrow space, lock holes, valve flowing channels, the inner holes of precision metal and fine pipes.

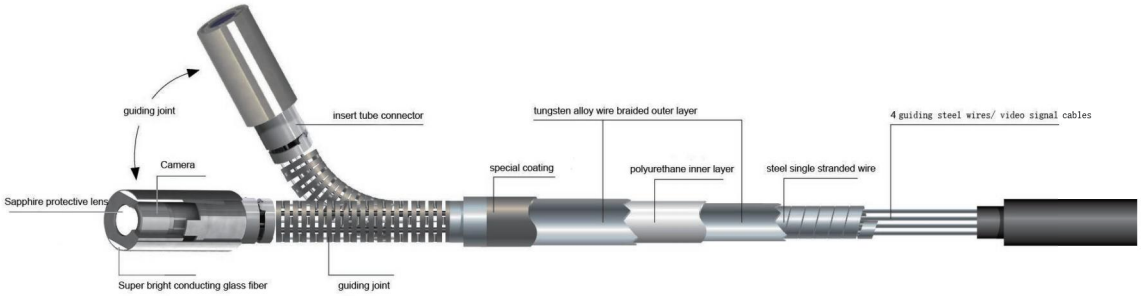





- Customize long insertion tube:

According to the acture inspecting requirments of the customer, we can customize long insertion tube from 10M to 30M.

With the long-distance transmission technology independently developed by our company, we can realize 360°all-way articulation and 100°bending angle on 15M tube. At the same time, we can customize one mega pixels camera on 10M tube, which will not only guarantee the HD image quality, but also fulfil the long-distance inspection needs.



Modular Design

- T series HD videoscope

With module design, the display and the tube can be detached by one button. It can be configured with 5.1 inches /3.5 inches HD display, and compatible with 1.8 mm/2.2mm/2.8mm/3.8mm/6.0mm/8.0mm front view/side view/front&side view dual-camera probe, and the tube length can customize from 1m to 30m, in order to meet different requirements.



- JX/F/TS series 3D Measurement Videoscope

With module design, the display, insertion tube and battery module can be detached. It is compatible with 1.0mm/1.8 mm/2.2mm/2.8mm/3.8mm/6.0mm/8.0mm front view/side view/front&side view dual-camera probe, and the tube length can customize from 1m to 30m, in order to meet different requirements.







Special Accessories



HDMI USB Cable



Battery



Parts List



Portable bag



Instrument box



Centering accessory



Support rod



Stand



Clamp tool



Application Fields

Borescope inspection is a method of Visual Testing(VT) and Non-destructive Testing(NDT). No need to dismantle or destroy the equipment, from a small hole, we can use industrial videoscopes probe to detect the place that cannot be directly observed by human eyes, like container, pipelines, equipments and narrow spaces, etc.

Inspection Field:

Quality control on the product manufacturing stage:

① Check the components: the inner defects of raw material, such as cracks, peeling, pulling, scratch, pit, protrusions etc.

② check the excess materials : check the various excess materials in the components cavity, like excess metal or non-metal objects, residual cleaning liquid, residual scraps, foreign objects etc.

③ Processing inspection: inspect the defects such as sand inclusion, burrs, damage, which are generated during mechanical processing processes.

④ Weld inspection: inspect the internal surface defects such as surface cracks, oxidation color, incomplete penetration and weld leakage on the weld seam.

Monitor the assembly details on the assembly stage

Assembly inspection: Check whether the assembly of each component meets the requirements of the drawings and whether there are assembly defects.

Inspect the defects and troubleshooting on the use stage

Operation status check: check the operating status and inner surface status of in-service equipment.







Aerospace industry:

- Aerospace
  - ① civil aviation: regular inspections and maintenance of aircraft
  - ② aviation: the manufacturing of military aircraft, civilian aircraft and aviation engines
  - ③ spaceflight: the manufacturing and maintenance of rockets, spacecraft and satellites
- Special inspection industry: inspection of special inspection institutes, boilers, pressure vessels, and pipelines
- Container boilers: boilers, stress container, cylinder production enterprises
- Electricity Energy: thermal power hydropower, wind power, nuclear power
- Automobile manufacturing: car manufacturing, automobile engine manufacturing, gearbox manufacturing
- Mechanical casting: machine and component casting, forging detection, STD oil pipeline detection
- Military manufacturing: special vehicles, artillery guns, ships, diesel engines, tank manufacturing, military weapon maintenance and maintenance
- Petroleum and chemical industry: pipelines and tank inspections of petroleum, chemicals, natural gas industries
- Food and pharmaceutical: food and beverage, biological fermentation, Pharmaceutical Industry
- Police security: public security checking, anti-terrorism, border defense, search and rescue activities, etc.
- Rail transit: railway locomotive and track maintenance
- Construction industry: grouting saturation measurement, steel factory pipeline testing
- Automotive aftermarket: automotive maintenance, repair and testing

