

## VH-100M

### 3D Measuring Videoscope



## VH-100M 3D Measurement Videoscope



3D measurement function is a major difficulty in the endoscope industry. Whether the process selection of product appearance materials or the research to the design of software measurement algorithms, our team made a large number of feasibility studies and simulation tests.

3.9mm 0°/90° camera

6.0mm 0°/90° camera



## Measurement function

Point-to-point/point-to-line/point to surface depth/ multiple point circumference measurement,  
 measurement accuracy  $\geq 95\%$

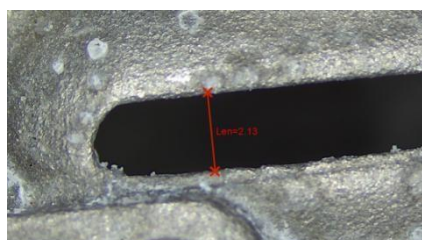
measurement modes

zoom in/out

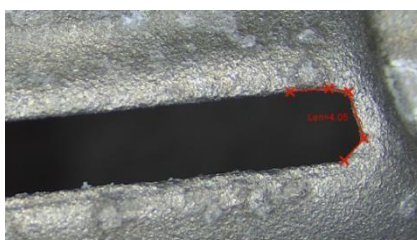
note text, mark,  
 free drawing



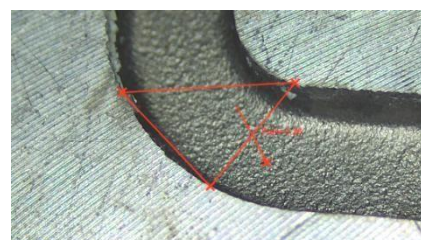
measurement data  
 displays in list



distance between two points



multiple point circumference



point-to-plane depth

**intelligent operating system, accurate measurement results**



**Intelligent Software**

**Picture in Picture**

static/dynamic image  
comparison software



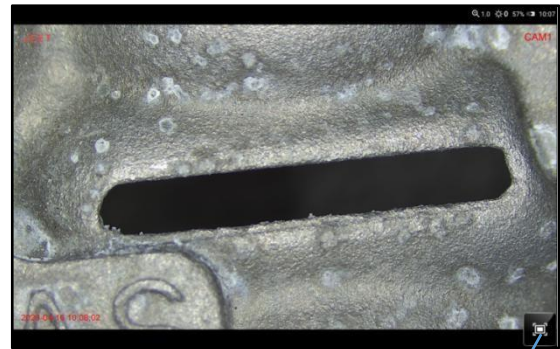
**1920\*1200 Super HD image, full screen**





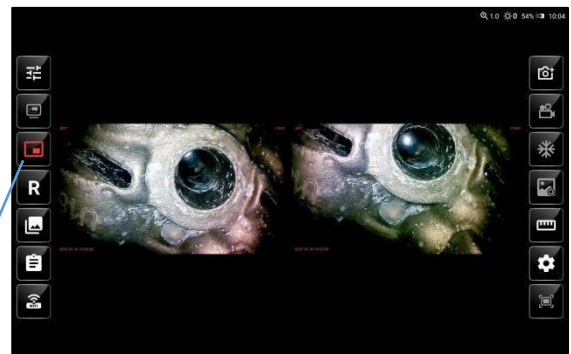


Full screen mode



Smart inspection

Dual-camera image



## Intelligent operation system

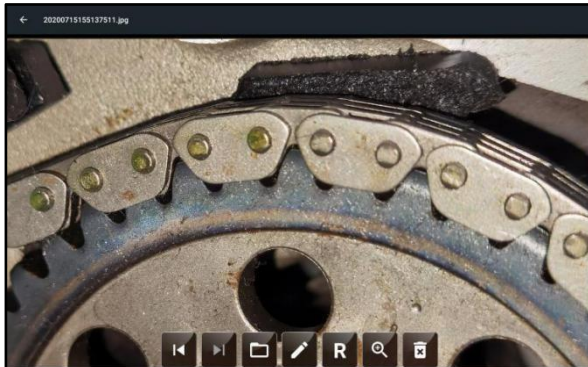
**Image adjustment:** resolution options Camera parameters setting: brightness/ contrast/ gamma/ ray/ saturation/sharpness

**Image effects:** auto balance/ negative film/ mirror image or rotation/image freezing

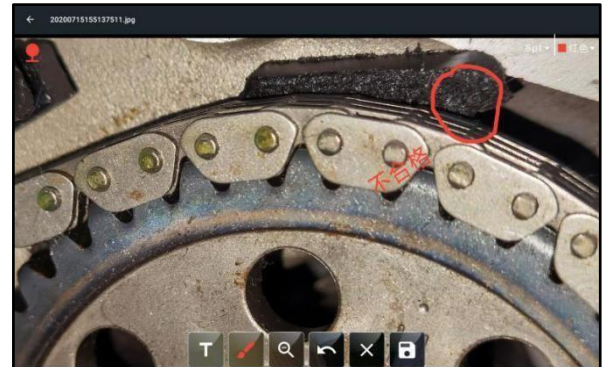
**Note text:** annotation/free drawing/mark



## Picture annotation, free drawing:

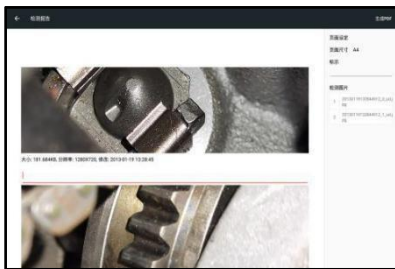


① select pictures or freeze the image ;  
 select "free drawing" icon.



② text note or mark and ; confirm  
 after operation to save the file.

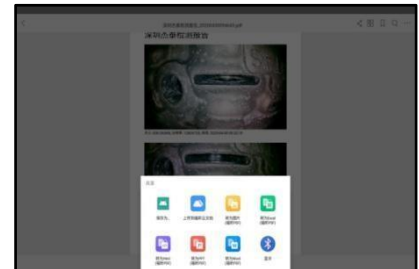
## MDI report generation



select pictures and editing the report



generate report in PDF file



report sent to the mobile phone

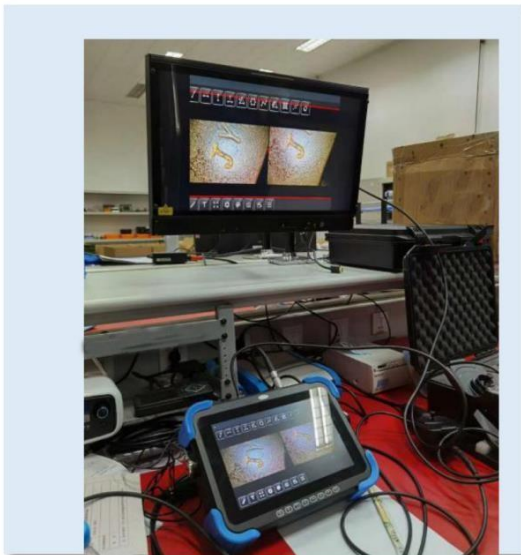


## Portable design



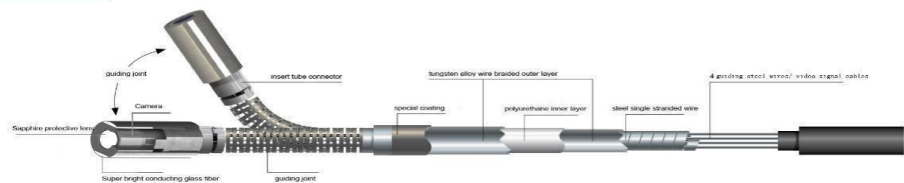
adjustable bracket





- HDMI image output, synchronous image display
- 3.0/2.0 dual USB port
- 32G SD card, support 128G card at maximum

## Tube system



### Illuminance

super bright ceramic light



### Wear resistant tube

5 layers of tungsten- braided tube;  
 Wear resistance: 20 times better than  
 ordinary probe



### 360° articulation

<b>Videoscope Probe</b>	
Diameter	6.0mm/3.9mm
DOF	10~100mm
Sensor	HD image sensor
Resolution	HD 1000000 pixels
Working length	2m/3m, customized
Material	abrasion-resistant alloy
Temperature	No
<b>System</b>	
Case size	360×360×100mm
Host size	300×220×59mm
Host weight	1.9KG
Host material	magnesium aluminum alloy
Display resolution	1920×1200
Joystick handle size	235×90×70mm
Joystick handle weight	0.4KG
Articulation	360°
Bending angle	≤150°
Storage	Internal memory/SD card/U disk ( optional )
I/O port	Micro USB×2;mini HDMI×1;SD slot×1;Air plug×1
Video output	HDMI
Light source	Real cold light source+fiber
Brightness level	5X
Illumination	Max 100000LX
White balance	Automatic
Battery capacity	3000mA/3.7V ×4
Battery charging	12V, 1A
Power	10W
Battery work time	2.5h
DC mode	Support charging while use
<b>Software</b>	
Operation system	Real-time intelligent multitasking operating system
User interface	Button+touch screen
File management	Intelligent file management system, support to the memory and SD card, USB storage media files and folders for the following operations: copy, cut, rename, delete, and so on



Image adjustment	Image adjustment: resolution options Camera parameters setting: brightness/ contrast/ gamma/ ray/ saturation/sharpness Image effects: auto balance/ negative film/mirror image or rotation/image freezing Note text: annotation/free drawing/mark
Image zoom in/out	3X
Image format	JPG
Video format	MP4
Text annotation	Photo text overlay, can choose the font size of the annotation text
Image annotation	Seal (default/custom), doodle, text input
Software upgrade	On-site upgrades are available via SD card and USB storage media
Language	English / French / German / Spanish / Japanese / Traditional Chinese / Simplified Chinese / Russian / Korean
Utility software	MDI report generation software Dual video input switching software (it shall be equipped with the direct side view switching pipeline) Picture in picture comparison software 3D measurement software
<b>Measurement function</b>	
Point to point distance	Measure the distance between two points
Point to line distance	Measure the distance from the point to the line
Point to surface depth	Measure the distance from the point to the surface
Multi-segment line length	Measure the total length of multiple continuous lines
Closed segment length	Measure the length of multiple closed continuous lines
Line to surface depth	Measure the depth of the line to the specified surface
Area	Measure the area of a closed polygon ( pending )
Partial magnifying window assist function	3X
Picture can be measured	Multiple measurements can be made continuously
Measuring list	Multiple measurements can be tabulated
Standard precision value	0.1mm
Minimum precision value	0.01mm
Accuracy	≈95%

