BCS

MILITARY OPTICS

BCS Optical F5000 2D Aviation Borescope Camera 6 mm

We Have a Borescope to Inspect All Your Aviation Needs
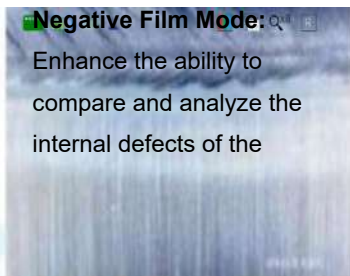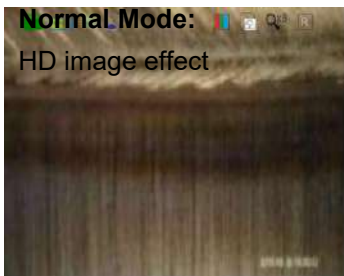
INTELLIGENT

Strong intelligent image processing system: with the functions of image rotation, white balance, exposure control, negative film and zoom in & out, comparative measurement, it can meet all kinds of complicated inspection needs.

White Balance: Auto white balance with strong color reduction; manual-control white balance according to inspection needs.

Exposure Setting: exposure suppression--the polished object is also inspected clearly; exposure compensation when checking large cavity, it can be more effective and clearer.


Normal Mode: HD image effect

Negative Film Mode: Enhance the ability to compare and analyze the internal defects of the

Features: Support 8X zoom in/out

FLEXIBLE ARTICULATION CONTROL

360 ° joystick-control articulation, damping type positioning design, precise probe locking technology, make the detection more accurate and efficient. Independently developed technology of long-distance transmission ensures bending angle ≥100°, even the tube reaches 10 meters.

360° precision articulation

Max 10 Mtrs

190°
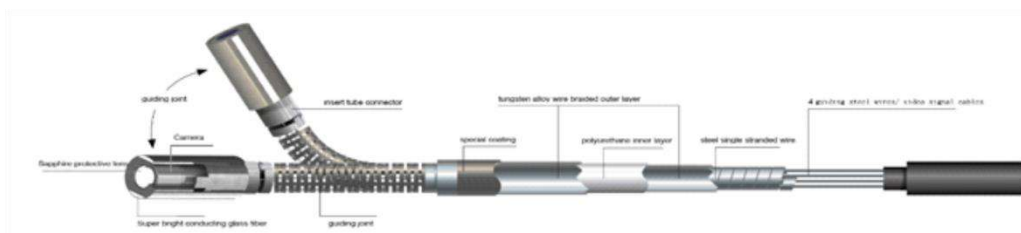
maximum bending angle ≥190

F5000 2D series videoscope is module designed. Configured with 5.1 inches HD display, it can be interchangeable with 3.5 inches small display, suitable for different inspection requirements. The monitor and probe can be separated by one button. It is compatible with different probes like: 6mm front view, 6mm sideview, 6mm front view& sideview dual lens.

Monitor and tube can be separated by one button.

WIFI button

360° joystick

Damping control

The image can be outputted to HD display by HDMI.

High temperature alarm function: Orange alarm when the temperature is above 65 ℃; Red alarm and shutdown when the temperature is more than 80 ℃.

640*480   1280*960   light transmission ratio≥95%

Working Hours: Original dual battery design,8 hours working time; real-time battery indication
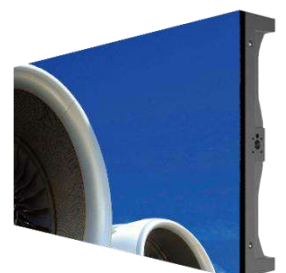
Display resolution: 1280*960, high light, wide color gamut, all sight viewing angle, ensure clear image, rich colors and good color reproduction.

F5000 2D Aviation BoreScope System	Probe Diameter(mm)	Φ6		
	Camera Pixels	1,000,000		
	Image Resolution	1280×720		
	Video Resolution	1280×720		
	DOF	front view: 10-100mm/ side view: 3-25mm or 10--100mm (optional)		
	FOV	120°		
	Viewing Direction	0° front view	90° side view	0° front view&90° side view
	Light Source	LED light/optic fiber		
	Illuminance	maximum: 50000+Lx 1~9 levels adjustable light		
	Tube Length	1.5mtr / 3 mtr / 5 mtr / 6 mtr (customized for other length)		
	Protecting Device of Durability	42mm buffer protection device between tube and handle		
	Articulation	360° joystick-control articulation		
	Bending Angle	maximun:190° (1.5M-3M) /120° (4M/5M) / 100°(6M-7M)/ 90° (8M-10M)		
	Probe Positioning	damping positioning & articulation lock device.		
	Wi-Fi Transmission	image transmission to Mobile phone, computer by Wi-Fi(optional)		
Monitor System	Display	5.1" color IPS display, all sight viewing angle, sunshade design		
	Display Resolution	1280*960		
	Zoom In/Out	8X		
	Language	English / French / German / Spanish / Japanese / Russian / Korean/ Polish/ Italian		
	White Balance Suppression	5 levels adjustable		
	White Balance	auto white balance, adjusts and eliminates speckles to achieve optimal images.		
	Image Effect	negative film/ black & white/standard		
	Temperature Indication	high temperature alarm (optional)		
	IP Level	probe/tube: IP67		
	Software Function	playback, image parameters adjust and rotate		
	Structure	hand-held integrated design		
	Image/Video Format	JPEG/MOV		
	Comparative Measurement	Use measuring probe and analog scale to compare and analyze the internal defect and size of the inspected object.		
	Data Port	HDMI video output, Micro USB port with water &dust proof device		
	Working Time	≥8h		
	Battery Capacity	3.7V，3200mAh×2		
	Power Charge	DC5V, 1A		
	Weight	0.5Kg~0.8Kg		
	Compatibility	interchangeable monitor and tube		

BCS Optical F3000 Aviation
Borescope Camera 3.9 mm & 6 mm

Aviation 3D Measurement Borescope
Measure Engine Corrosion & Pitting
- **Camera 3.9 mm**
- **Camera 6 mm**

## We Have a Borescope For All Your Aviation Needs

F3000 Pro 3D Measurement

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, The R&D team made a large number of feasibility studies and simulation tests.

3.9mm 0°/90° Camera

6.0mm 0°/90° Camera
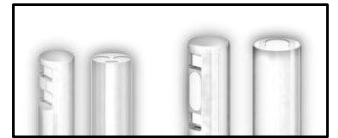
Measurement Function

Measurement Accuracy ≥ 95%

Identify and Measure
Surface defects.
Cracks and pitting.
Holes and Engine wear.
Erosion and corrosion of the engine.
Everything larger than 0.001 can be measured.

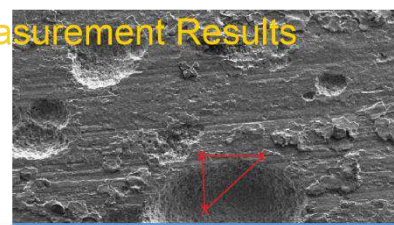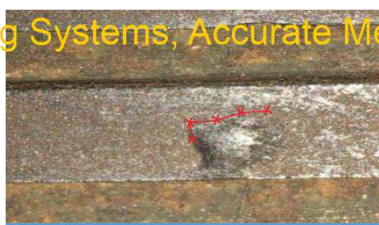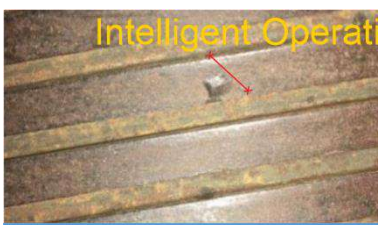Measurement Modes

Measurement Data Displays in List

Zoom in/out

Note text, mark, free drawing

Intelligent Operating Systems, Accurate Measurement Results

Distance Between Two Points

Multiple Point Circumference

Point -To -Plane Depth

Picture in Picture

Static / Dynamic Image Comparison Software
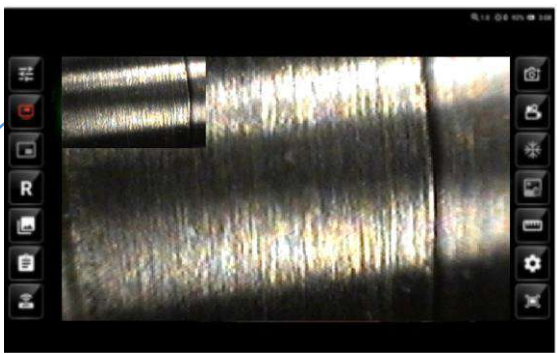
1920*1200 Super HD image, full screen
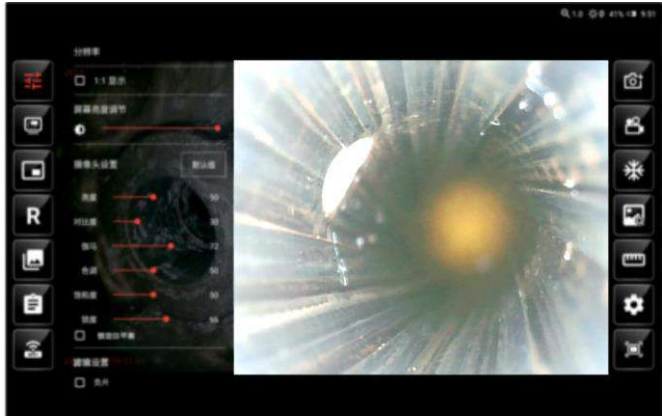
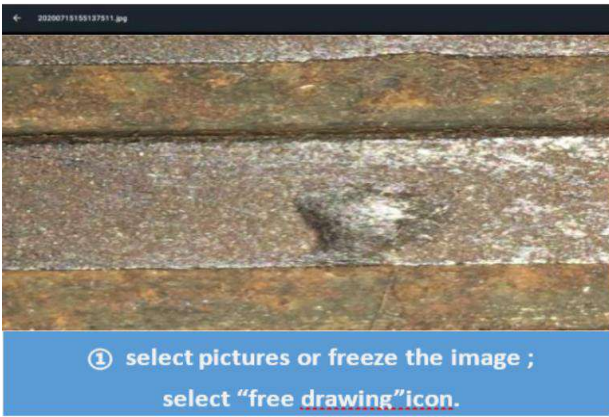**Full screen mode**

Smart inspection
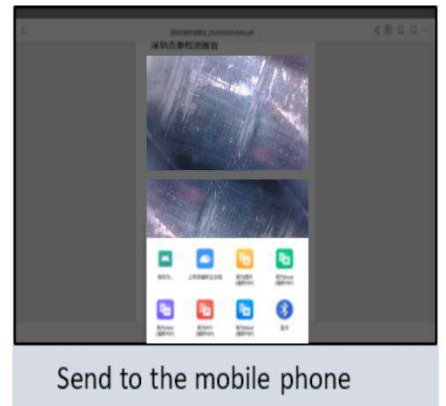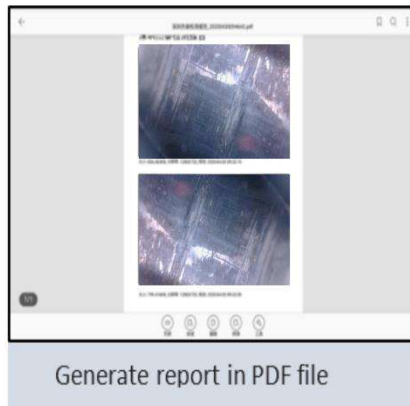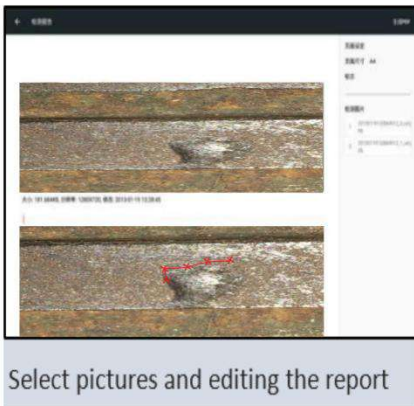
Dual-Camera image
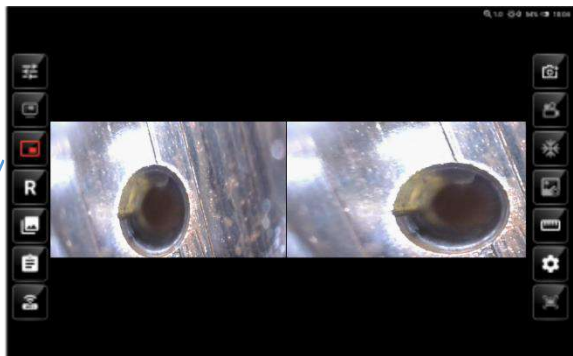
Intelligent Operation System

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

Send to the mobile phone

Portable Design

Adjustable Bracket

Buckle To Fix Monitor / Handle

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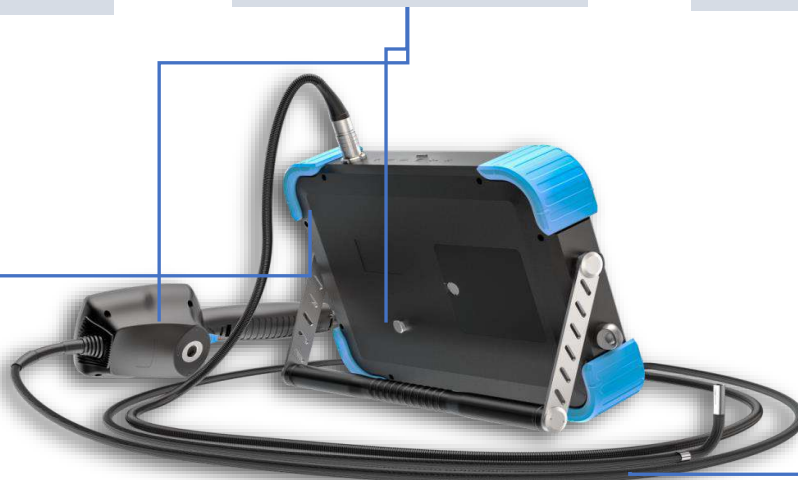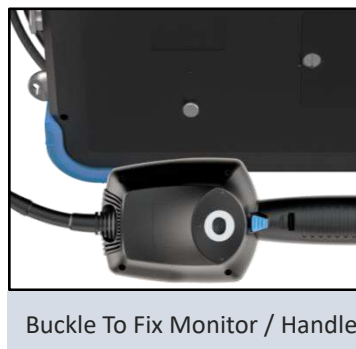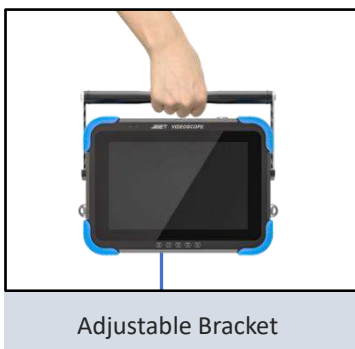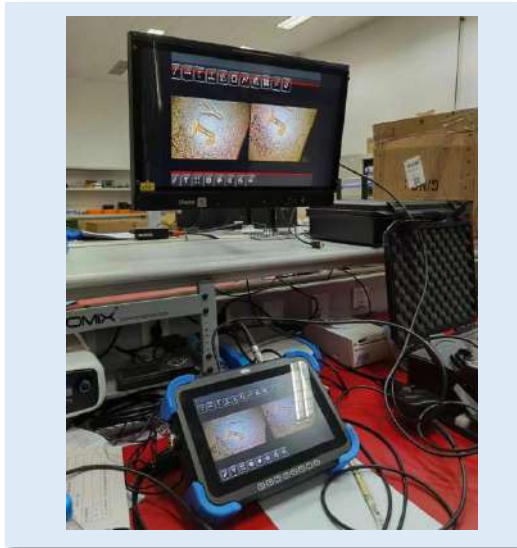
- HDMI image output, synchronous image display
- 3.0/2.0 dual USB port
- 32G SD card，support 128G card at maximum

Small Arms Borescope System
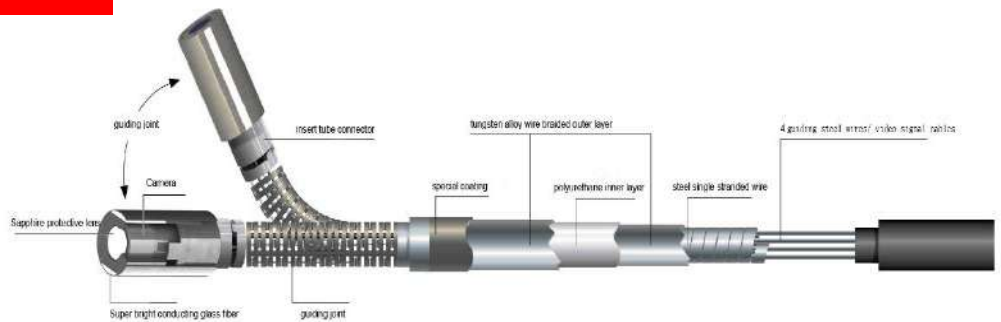
360° Articulation

Illuminance

Super bright ceramic light

Wear Resistant Tube

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

Maximum Bending Angle: 190°

Parameters

Probe	
Diameter	3.9 mm / 6.0 mm
Dof	10~100mm
Sensor	HD image sensor
Resolution	HD 1000000 pixels
Working Length Both Camera Diameters	1.5 mtr / 2 mtr /3 mtr
Material	Abrasion-resistant alloy
Temperature	No

System	
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

Software

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 etc.
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 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 / 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

Measurement Function

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
Partial Magnifying Window Assist Function	3X
Picture Can Be Measured Times	Multiple measurements can be made continuously
Measuring List	Multiple measurements can be tabulated
Precision Value	0.1mm
Minimum Precision Value	0.01mm
Accuracy	≈95%