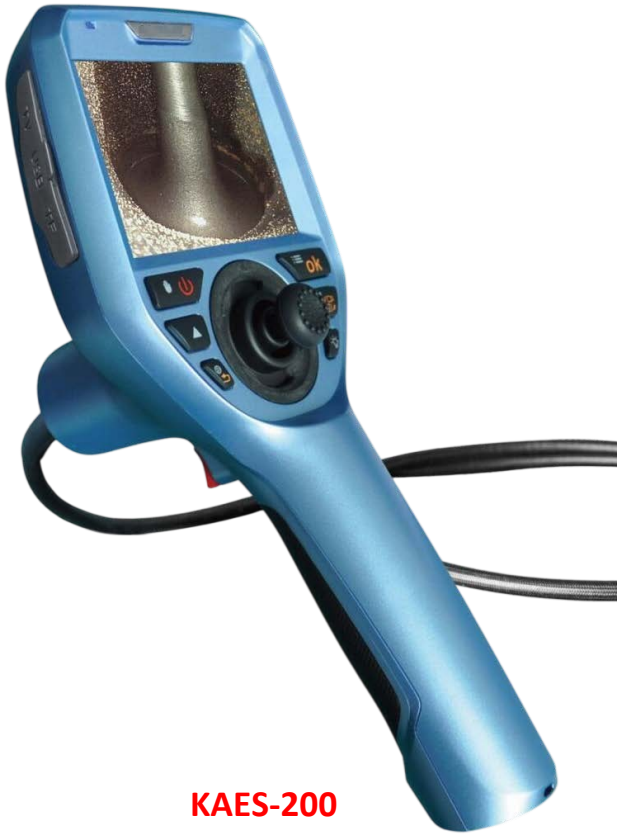
Automotive Endoscope

Description

Automotive Endoscope is designed with ultra high definition camera capable of capturing both images and videos with clear and real inspection quality. The instrument is equipped with a 3.5 inch TFT daylight display and a 690,000 pixel Ultra HD camera which provides smooth static and dynamic imaging. It supports capturing images during video recording and stores images in BMP lossless format while videos are stored in MP4 format.

The probe is designed with a maximum bending angle of 210° allowing direct inspection of valves without the need for multi-angle adjustments. It is constructed with tungsten alloy insertion tube and titanium alloy probe with double isolation structure and advanced laser welding process, making it waterproof, oil resistant and corrosion resistant. The system can optionally operate at high temperatures up to 200℃ with cooling support.

The device features HDMI connectivity for large screen display, enabling better visualization and consultation. It is lightweight, portable and ergonomically designed for single hand operation with a user-friendly interface, making it suitable for various industrial and automotive inspection applications.



KAES-200

Features

- Ultra high definition camera with image and video capture
- 210° large bending angle for direct inspection
- Oil resistant, corrosion resistant and waterproof design
- Tungsten alloy insertion tube with titanium alloy probe
- HDMI output for large screen display
- High temperature operation up to 200℃ (Optional)
- Lightweight and portable design
- User-friendly interface with one hand operation

Applications

- Automotive engine inspection
- Industrial inspection
- Pipeline inspection
- Mechanical component inspection
- Maintenance and troubleshooting

Uses

- To inspect internal and hard-to-reach areas
- To capture real-time images and videos for analysis
- To detect faults, leakage and damage inside components

Technical Specifications

Parameter	Specification
Product Name	Automotive Endoscope
Model	KAES-200
Make/Brand	KLABS
Integrated Design	Probe, Screen, Insert tube, Handle, Battery and other integrated handheld design
Compatibility	Replicable consumable tungsten insertion tubes
Tube Length	1m
Probe Control	Mechanical 360° all-way articulation
Bending Angle	Maximum 210°
Illumination Type	Front LED light guiding (LED light life ≥30,000 hours)
Illuminance	Maximum 20,000lx
Brightness Level	Manual 7-level adjustment
White Balance	Automatic white balance, central focus photometry and image processing technology to prevent surface exposure of bright objects
Display	3.5 inch TFT daylight display
Image Resolution	960*720
Photo / Video	Yes
Document Format	Image: BMP / JPEG ; Video: MP4
Image Preview	List preview mode, full-screen view optional / time watermarking
Memory	Standard 8G capacity TF card, maximum support 32G
Equipment Durability	Buffer protection device for connecting main engine and wear-resistant pipe
Insertion Tube	Oil resistant and anti-corrosion
Optional	Cooling equipment
Menu Language	Simplified Chinese, Traditional Chinese, English, Japanese, Korean, French, German, Portuguese, Spanish, Russian
Probe Diameter	ϕ6±0.1mm
Pixels	690,000 pixels
Digital Zoom	Support real-time 4x zoom, 8x partial zoom when playback
Probe Material	Titanium alloy protective shell
Depth of Field	25-100mm
Field of View	85°
Visible Direction	Front
Host Weight	≤0.45kg (with battery)
Waterproof	Host IP55, Probe IP67
Output Port	HDMI
Power	18650 rechargeable lithium batteries, real-time online charging

Voltage	DC 4.2V
System Operating Time	≥4 hours (1 battery)
System Operating Temp	-10 ~ 50°C
Tip Operating Temp	-20 ~ 60°C
Storage Temperature	-20 ~ 60°C
Relative Humidity	15% ~ 90%
Standard Configuration	Video-scope, Instrument case, Card reader, 8G TF card, Battery, User manual
Optional Accessories	Cooling system for insertion tube, Side reflective mirror, Detachable magnetic base, HDMI cable