

M-series

Mechanical 360° Industrial Endoscope



Visit www.yateks.com for more info.

Industrial Endoscope
Series

Introduction:

Yateks Mechanical 360°Industrial endoscope is a newly released product in combination with mechanical 360°articulation function & interchangeable tubes function.

M-series apply mechanical joystick control structure. M-series is portable with the whole weight of only 0.6KG. With the interchangeable tubes function, one host can match different diameters & lengths & lens of the insertion tube to meet customers' various needs and greatly save costs.

Features:

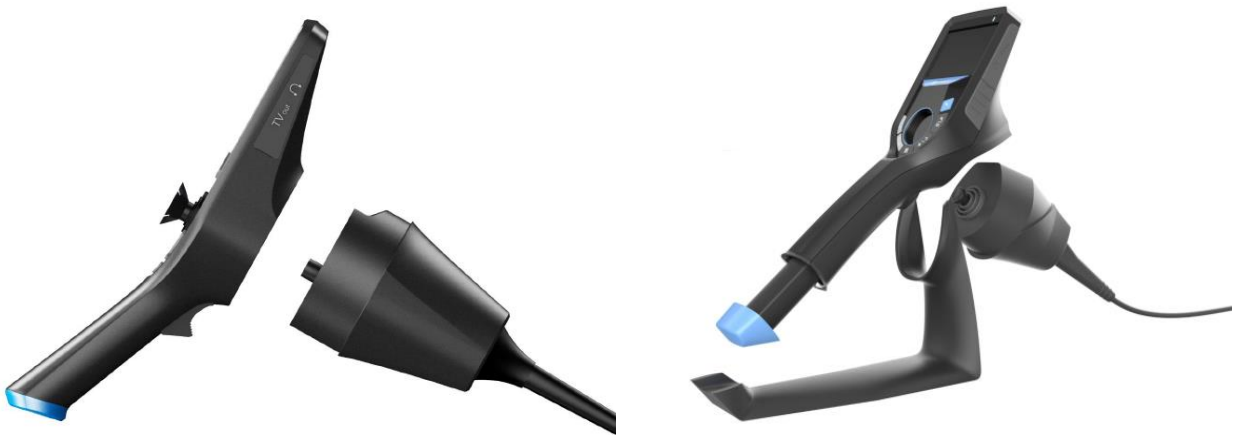
- ◆ Hand-held ergonomics design, portable with the whole weight of 0.6KG



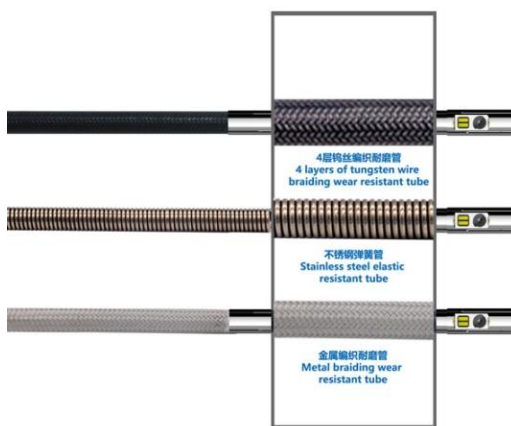
- ◆ Mechanical rotation for 360° and bend for 160°---convenient, accurate and automatic reset.



- ◆ Interchangeable tubes, one host can match different diameters & lengths & lens of the insertion tube to meet customers' various needs and greatly save costs.



- ◆ Anti-friction and anti-erosion, the insertion tube is woven with 4-layer of tungsten alloy



- ◆ IP67 standard of the probe—corrosion proof, waterproof and dust-proof. Reliable examination can be carried out even under all kinds of bad conditions.
- ◆ Apply LED packing technology. Probe illuminance can reach 20,000 lux, 200 times than indoor fluorescent. The dynamic optimized amount of light can be applied to different working conditions.
- ◆ 6-level high and low brightness adjustment, can detect different materials under different environments.
- ◆ 5-times digital zoom in/out, ensure the clear image.
- ◆ Easy to operate, core functions including taking photos, storage and recording video images.
- ◆ USB, big capacity SD card and TV out interface, data can be shared and analyzed.
- ◆ Large capacity charging battery can ensure continuous work for over 3 hours,

Application field:

1. Aviation & Space Industry

It can be used to inspect regularly turbine, blades, engine, surface of welding and conductor pipes, combustion chamber in plane, and in development and manufacture of rocket.

2. Electrical Production and Construction Unit

It can be used to detect and monitor defects of important apparatus such as turbine, pipes.

3. Petro - Chemical and Pressure Container Industries

It can be used to inspect reserve tanks, heat exchangers and tank trucks in oil refinery, pipes in chemical plant and containers, steel cylinders and pipes in special inspection unit and pressure container plant.

4. Railway, Ship, Construction Engineering and Research Unit

Railway/Ship: It can be used to inspect electrical locomotive, air - conditioner, turbine, heater, gas - engine and flames of boiler.

Construction Engineering: It can be used to inspect erosion and fouling of pipes, rust of concrete iron, break of support shaft and bridge connection part; to observe caves inside tunnel and construction model; to diagnose erosion and blockage of running water pipe.

Research Unit: It can be used in observation, research, trial, archaeological work and etc.



Specifications

	Category	Description
System	Dimension/Weight	315*111*173mm/0.75KG
	Display screen	3.5" TFT LCD (320*240)
	Articulation	Mechanical rocker with lens able to rotate in 360-degree,automatic lock
	Functions	Photography, video, brightness control, menu, image zoom in/out, screen frame, image flip
	Storage	8G (UP TO 32G)
	I/O port	SD card, headset, TV-OUT, charge and Micro USB
	Battery/Standby time	Li on Battery 18650 x1 / 4 hours
	Brightness control	6 degrees for brightness adjustment
	Software	Operation system
User interface		Drop-down operation menu
File management		File & Folder creation, naming, deleting Storing to SD card or USB ThumbDrive
Image control		Flip, zoom in/out, screen frame
Image format/Video format		JPEG,JPG/AVI(record date and time)
Language		English/Deutsch/Chinese/Japanese/Korean/Russian
Operating environment	Monitor working temperature	-10~50°
	video probe working temperature	-20~70°
	Relative humidity	Highest 90%,no condensation
	Waterproof	Monitor IP54/video probe IP67

Models for M series

Model No	Part No	Diameter [mm]	Insertion Tube Length [m]	Camera				Optic		Light		Probe Bending
				Location	Head Type	CMOS Sensor	Resolution	Depth of Field	Angle of View	Type	[Lux]	
M310FN	11130010	2.8	1	Front	YA	D	640*480	3-25mm	80°	LED	4,000	130±10°
M315FN	11130015		1.5									120±10°
M320FN	11130020		2									110±10°
M410FM	11141010	3.9	1	Front	PG	A	720*576	7 - 80mm	110°	LED	6,000	170±10°
M415FM	11141015		1.5									170±10°
M420FM	11141020		2									150±10°
M430FM	11141030		3									130±10°
Model No	Part No	Diameter [mm]	Insertion Tube Length [m]	Camera				Optic		Light		Probe Bending
				Location	Head Type	CMOS Sensor	Resolution	Depth of Field	Angle of View	Type	[Lux]	
M610FM	11161010	6	1	Front	QB	A	720*576	7-80mm	80°	LED	20,000	170±10°
M615FM	11161015		1.5									150±10°
M620FM	11161020		2									120±10°
M630FM	11161030		3									120±10°
M650FM	11161050		5									100±10°
M680FM	11161080		8									100±10°
Model No	Part No	Diameter [mm]	Insertion Tube Length [m]	Camera				Optic		Light		Probe Bending
				Location	Head Type	CMOS Sensor	Resolution	Depth of Field	Angle of View	Type	[mW]	
M610RF	11165010	6	1	Front	PR	B	720*576	50mm-∞	80°	Infrared	100	150±10°
M615RF	11165015		1.5									150±10°
M620RF	11165020		2									130±10°
M630RF	11165030		3									110±10°