

yateks<sup>®</sup> USA

P Series

Industrial Video Borescope



## Introduction:

The Yateks P series industrial video borescope is composed of a flexible tube and a small - size body. Its CMOS image process system with 1,000,000 pixels provides ultra clarity and a perfect original display. A component design with 8 - inch ultra clear touch screen, 100,000 LUX brightness, an electronic magnetic rocker which can adjust omnidirectionally for 360°, and its lower price, 30% - 50% cheaper than similar specifications, which helps the P Series enjoy its superiority.

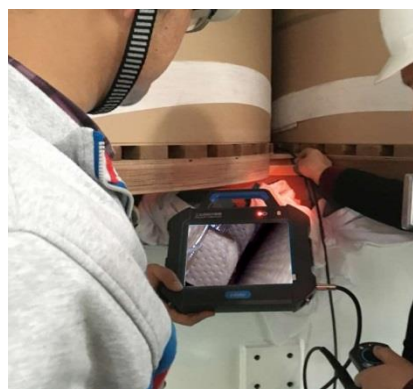
## Technical Advantages:



1、 Intelligent image processing system with megapixels module to show a clean image.

2、 Built-in color setting and module automatically identify systems.

3、 One base unit can match all kinds of probes.



4、 Fiber and LED with 10 degree brightness adjustment.

5、 8 inch high resolution screen, image visible under sun light.

6、 Side lens, dual lens and interchangeable lens are available.

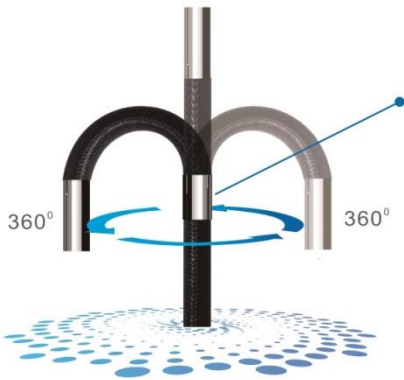


## Locking automatically and fixed position memory

Holding on for 3 seconds to lock when probe bent; Open fixed position memory function after locking. Probe will bend around locking point when the rocker is operated again.

## Electromagnetic rocker control structure

Probe bends arbitrarily for 360°, so flexible that a controller can easily control probe with one thumb.



## Electronic magnetic rocker which can adjust omnidirectionally for 360°

Step by step rocker controlling system provides precise camera location.



original



high rendition

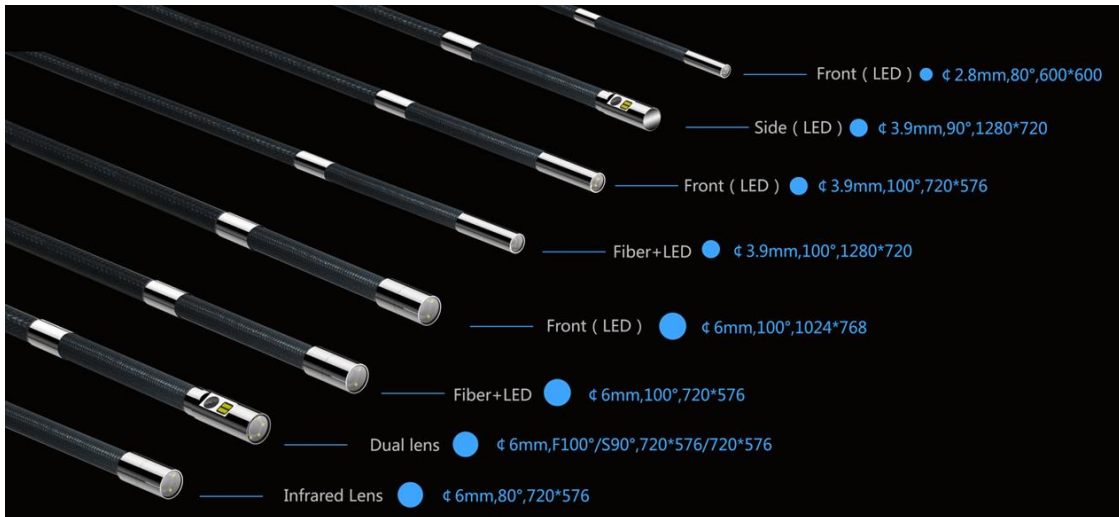


short distance



long distance

presetting four color setting modes



Variety Choices - front LED , side LED, dual lens with both front and side LED, fiber+LED are all available to meet different demands.

## 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	246*321*123mm/2.3KG
	Display screen	8" IPS industrial HD touch LCD screen with resolution 1024*768(ratio 4:3)
	Control lever	Electric rocker with lens able to rotate in 360-degree,automatic set, direction fine tuning adjustable
	Functions	Photography, video, brightness control, locking and fine tuning
	Storage	32G high speed SD card (UP TO 128G)
	I/O port	SD card, VGA port (1024*768) ,charge and mini USB
	Battery/Standby time	Four 18650 Lithium batteries(replaceable)
	Brightness control	5 degrees each for high and low brightness adjustment,10 degrees in total
	Combining form	Monitor + probe Separable group

	Compatibility	Support different diameter probes
Software	Operation system	Real time multitasking operation system
	User interface	Touch screen operation menu
	File management	Support image and video play, delete, format memo and naming
	Image control	Zoom in/out(1.0X-1.5X,5 steps),playback, picture freeze-frame, image reversal, mirror image
	Image format/Video format	JPEG,JPG/AVI(record date and time)
	Language	English/Chinese/Korean/German/Russian/Japanese
	Color settings	4 modes for different applications
	White balance	Automatic/manual white balance
	Exposure mode	Automatic/manual/shutter/aperture exposure
	Upgrade	Upgrade by SD card service pack
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 P-series

Model	Description										
	Diameter [mm]	Insertion Tube Length [mm]	Camera				Optic		Light		Probe Bending
			Location	Head Type	CMOS Sensor	Resolution	Depth of Field	Angle of View	Type	[Lux]	
P310FN	2.8	1	Front	YA	D	600*600	3-25mm	80°	LED	4,000	130±10°
P315FN		1.5									120±10°
P320FN		2									110±10°
Model	Description										
	Diameter [mm]	Insertion Tube Length [mm]	Camera				Optic		Light		Probe Bending
			Location	Head Type	CMOS Sensor	Resolution	Depth of Field	Angle of View	Type	[Lux]	
P410SM	3.9	1	Side	SC	C	1280*720	5-80mm	90°	LED	10,000	170±10°
P415SM		1.5									170±10°
P420SM		2									150±10°
P430SM		3									120±10°
Model	Description										
	Diameter [mm]	Insertion Tube Length [mm]	Camera				Optic		Light		Probe Bending
			Location	Head Type	CMOS Sensor	Resolution	Depth of Field	Angle of View	Type	[Lux]	
P410FM	3.9	1	Front	PG	A	1024*768	7-80mm	110°	LED	6,000	170±10°
P415FM		1		YC	C		5-80mm		Fiber + LED	100,000	170±10°
		1.5		PG	A		7-80mm		LED	6,000	170±10°
P420FM		1.5		YC	C		5-80mm		Fiber + LED	100,000	170±10°
		2		PG	A		7-80mm		LED	6,000	150±10°
P430FM		2		YC	C		5-80mm		Fiber + LED	100,000	150±10°
		2		PG	A		7-80mm		LED	6,000	120±10°
P450FM		3		YC	C		5-80mm		Fiber + LED	100,000	120±10°
		3		PG	A		7-80mm		LED	6,000	110±10°
P450FM		5		PG	A		7-80mm		LED	6,000	110±10°
		5		YC	C		5-80mm		Fiber + LED	100,000	100±10°
Model		Description									
	Diameter [mm]	Insertion Tube Length [mm]	Camera				Optic		Light		Probe Bending
			Location	Head Type	CMOS Sensor	Resolution	Depth of Field	Angle of View	Type	[Lux]	
P610FN	6	1	Front	QB	A	1024*768	5-25mm	80°	LED	24,000	170±10°
P615FN		1.5									170±10°
P620FN		2									150±10°
P630FN		3									120±10°
Model	Description										
	Diameter [mm]	Insertion Tube Length [mm]	Camera				Optic		Light		Probe Bending
			Location	Head Type	CMOS Sensor	Resolution	Depth of Field	Angle of View	Type	[Lux]	
P610FM	6	1	Front	QB	A	1024*768	7-80mm	80°	LED	24,000	170±10°
P615FM		1		YE	C		8-150mm		Fiber + LED	100,000	170±10°
		1.5		QB	A		7-80mm		LED	24,000	170±10°
P620FM		1.5		YE	C		8-150mm		Fiber + LED	100,000	170±10°
		2		QB	A		7-80mm		LED	24,000	150±10°
P630FM		2		YE	C		8-150mm		Fiber + LED	100,000	150±10°
		2		QB	A		7-80mm		LED	24,000	120±10°
P650FM		3		YE	C		8-150mm		Fiber + LED	100,000	120±10°
		3		QB	A		7-80mm		LED	24,000	110±10°
P680FM		5		YE	C		8-150mm		Fiber + LED	100,000	110±10°
		5		QB	A		7-80mm		LED	24,000	100±10°
P680FM		8		YE	C		8-150mm		Fiber + LED	100,000	100±10°
	8	QB	A	7-80mm	LED	24,000	100±10°				
Model	Description										
	Diameter [mm]	Insertion Tube Length [mm]	Camera				Optic		Light		Probe Bending
			Location	Head Type	CMOS Sensor	Resolution	Depth of Field	Angle of View	Type	[Lux]	
P610DM	6	1	Front&Side	PD	A/A	720*576/720*576	F7-80mm/S3-30mm	F100°/S90°	Front&Side LED	F15,000/S10,000	170±10°
P615DM		1.5									170±10°
P620DM		2									150±10°
P630DM		3									120±10°
P650DM		5									110±10°
P680DM		8									100±10°