



yateks[®] USA

P Series

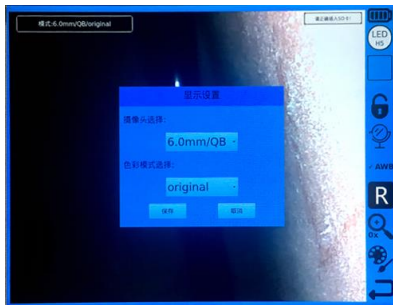
Industrial Video Borescope



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.

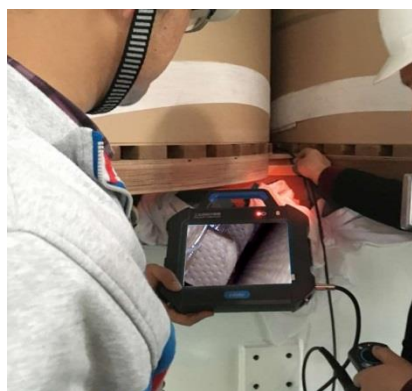
Technical Advantages:



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.

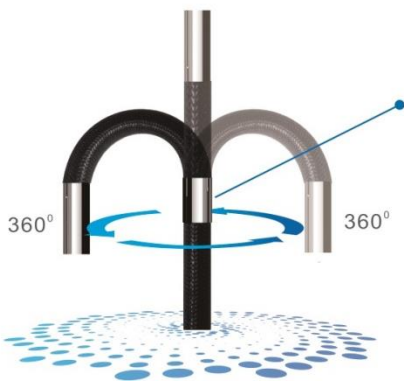


Locking automatically and fixed position memory

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

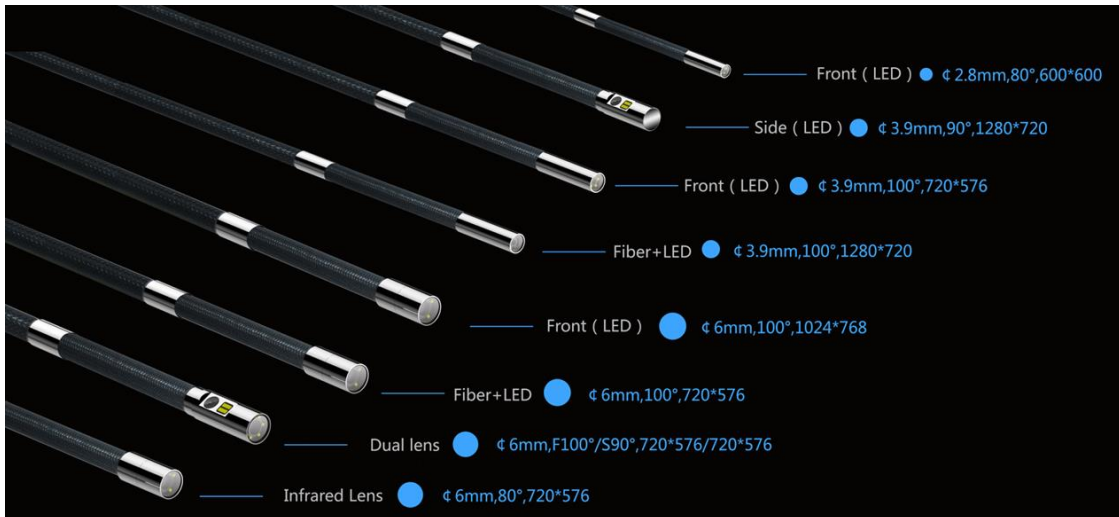


short distance



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 | AA | 720*576/20*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° |