

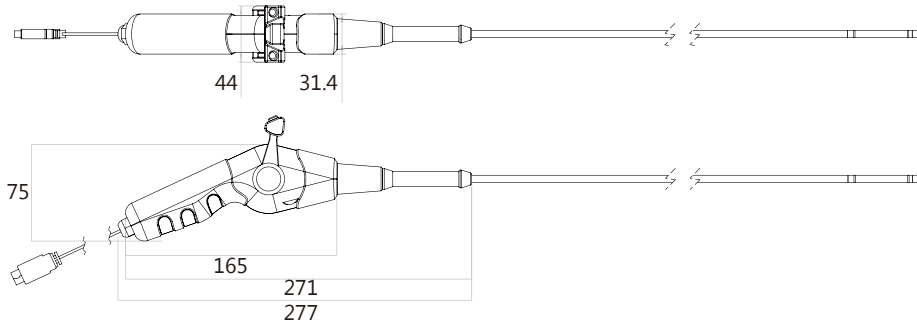


coming soon

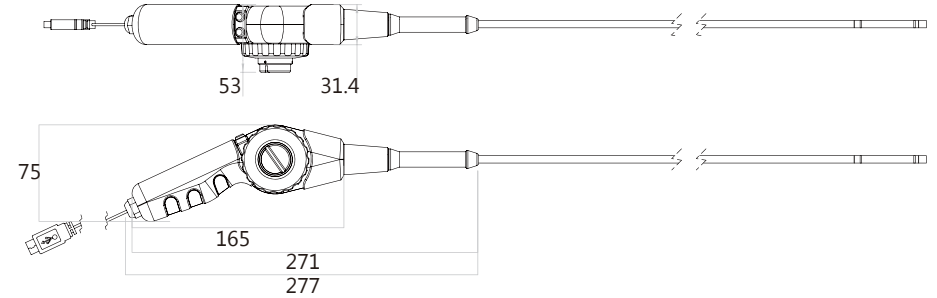
coming soon

Model	10-VD208-100-2X-XX	10- X VD408-164-2X-XX	10-VD408-209-2X-76	10- X VD508-311-2X-77	10- X VD508-311-2X-88	10- X VD508-311-2X-93	10- X VD508-311-2X-158
Resolution	400 x 400	1280 x 720	1280 x 720	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Lens Angle	91° / 120°	120°	76°	77°	88°	93°	158°
LED (High-intensity)	4 pcs	6 pcs	6 pcs	6 pcs	8 pcs	8 pcs	10 pcs
Sensor Type	1/18" CMOS	1/11" CMOS	1/9" CMOS	1/6" CMOS	1/6" CMOS	1/6" CMOS	1/6" CMOS
Interface	USB 2.0	USB 2.0 / USB 3.0	USB 2.0	USB 2.0 / USB 3.0	USB 2.0 / USB 3.0	USB 2.0 / USB 3.0	USB 2.0 / USB 3.0

2L SERIES



2W SERIES



10-VD508-311-2L-77



10-VD208-100-2L-120



10-VD508-311-2W-77



10-VD208-100-2W-120

MISUMI has two types of 2-way borescopes.

1. Turn the turntable controller to adjust the bending angle.
2. Move the level controller to adjust the bending angle.

Turn the turntable controller to adjust the bending angle.

Move the level controller to adjust the bending angle.



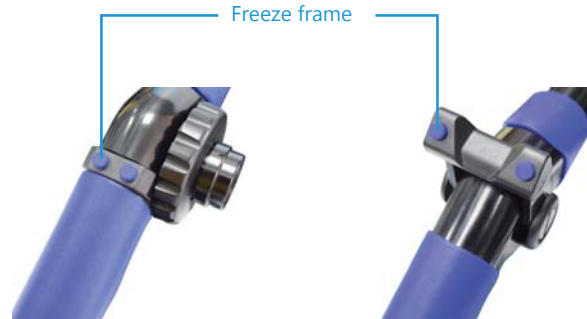
2W SERIES



2L SERIES

Freeze frame function

Freeze frame function is perfect during inspection or surgery to pause image and do analysis.



Waterproof IP 67

Protected from total dust ingress.
Protected from long term immersion and 1 meter in depth.



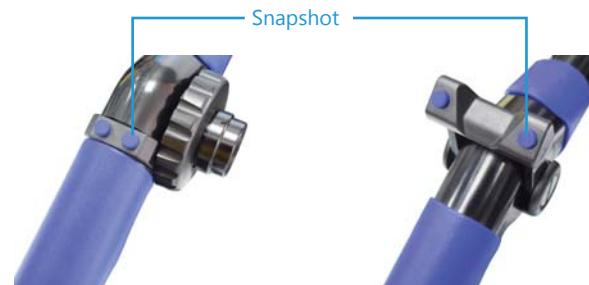
Tighten / loosen to control camera head!

Turn the adjustable wheel to flexibly control camera articulation angle. Articulation angle can be tighten / loosen at any degree.



Snapshot function

Snapshot function is perfect for capturing and saving the photo during inspection



Camera parameter adjustable

Camera parameter can be adjusted on the smartphone via the Misumi app and PC viewer software AMCAP.

- Brightness ✱ —————
- Gain ✓ —————
- Contrast ● —————
- Gamma γ —————
- White Balance 📷 —————
- Exposure time ABS ☑ —————
- Sharpness ✱ —————
- Backlight Compensation ☑ —————
- HUE 🔄 —————
- Saturation 🌈 —————
- Mirror ▲ —————
- Flip ▶ —————
- Frame rate 📺 ————— 30fps
- Resolution 📺 1920x1080 ▼



1080p / 10-xVD508-311-2x SERIES

Resolution	USB 2.0	1920x1080 @ 15~30fps MJPEG/ 5fps YUV 1280x720@ 15~30fps MJPEG/ 10fps YUV 960x540; 848x480@15~30fps MJPEG/ 20fps YUV 640x480; 640x360; 424x240;320x240; 320x180; 176x144; 160x120@15~30fps MJPEG; 30fps YUV
	USB 3.0	standard: 1920 x 1080; 1280 x 720; 640 x 480 @60 fps MJPG/YUV fixed: 1920 x 1080 @60 fps MJPEG/YUV 1280 x 720 @90 fps MJPEG/YUV 640 x 480 @120 fps MJPEG/YUV 320 x 240 @ 240 fps MJPEG/YUV
Camera head material	stainless steel	
Probe length	2M (USB 2.0) / 1.5M (USB 3.0)	
Probe length material	outer braid and stainless steel	
Articulations	2 way articulations	
Bending section length(mm)	42.7 mm	
Radius of gyration (at angle 90°)	21 mm	
UVC format	MJPEG / YUV	
Image area	2.7288 x 1.5498mm	
Sensitivity	553 mV/(Lux-sec)	
Dynamic range	73.3 dB @ 15.5x gain	
Lens (specify when ordering)	77° lens	1.83mm/2.0/F5.0/8.0 (H= 69°; V= 43°; D= 77°)
	88° lens	1.55mm/F5.7 (H=48.4°; V=78.3°; D=86.8°)
	93° lens	1.5mm/F5.7 (H=81°90';V=50°18';D=92°82')
	158° lens	1.523mm/F4.8/6.0/8.0 (H=132°; V=65°; D=158°)
LED dimmer	support	
Snapshot & Freeze Function	support	
Camera setting on smartphone	support	
Compatibility with wifi DVR	support	
Power source	DC 5V (USB) / 190mA	
Storage temperature	-30 to 60 Degree C	
Working temperature	-10 to 45 Degree C	
Operating system	Windows XP, windows Vista, window 7, windows 8, windows 10, Linux, MAC OSX	

Model	View Angle	Interface	* LED (high-intensity)	Control Type
10-VD508-311-2L-77	77°	USB 2.0	6 pcs	lever
10-VD508-311-2L-88	88°	USB 2.0	8 pcs	lever
10-VD508-311-2L-93	93°	USB 2.0	8 pcs	lever
10-VD508-311-2L-158	158°	USB 2.0	10 pcs	lever
10-SVD508-311-2L-77	77°	USB 3.0	6 pcs	lever
10-SVD508-311-2L-88	88°	USB 3.0	8 pcs	lever
10-SVD508-311-2L-93	93°	USB 3.0	8 pcs	lever
10-SVD508-311-2L-158	158°	USB 3.0	10 pcs	lever
10-VD508-311-2L-77	77°	USB 2.0	6 pcs	turntable
10-VD508-311-2W-88	88°	USB 2.0	8 pcs	turntable
10-VD508-311-2W-93	93°	USB 2.0	8 pcs	turntable
10-VD508-311-2W-158	158°	USB 2.0	10 pcs	turntable
10-SVD508-311-2W-77	77°	USB 3.0	6 pcs	turntable
10-SVD508-311-2W-88	88°	USB 3.0	8 pcs	turntable
10-SVD508-311-2W-93	93°	USB 3.0	8 pcs	turntable
10-SVD508-311-2W-158	158°	USB 3.0	10 pcs	turntable

* with high-intensity white LED

10-SVD508-311-2L-158

Cable	Connector	Camera type	Resolution	Control type	Lens angle	
10 Nylon braided sleeveing	VD / UD	USB 2.0 type A	508 Color	311 1080p	2L 2 way / Lever 2W 2 way / Turntable	77 77°
	VM / UM	Micro USB B				88 88°
	VT / UT	USB 2.0 type C				93 93°
	SVD / SUD SVT / SUT	USB 3.0 type A USB 3.0 type C				158 158°
	"V" D	V: with white LED				
	"U" D	U: with white / IR LED				

1080p / 10- \times VD5 \times 8-311-2W SERIES

UVC signal output !

The connector is available at USB A type, Micro USB OTG B type, USB type C or customized for specify when ordering.



Type C Micro USB OTG USB A

Front / Side view (optional)

Select the camera type according to the requirement

-  Ø2.8mm / 400p RES. / 120° angle view / front view
-  Ø3.6mm / 720p RES. / 76° angle view / front view
-  Ø6mm / 1080p RES. / 77° angle view / front view
-  Ø7mm / 1080p RES. / 93° angle view / front view
-  Ø7.9mm / 1080p RES. / 158° angle view / front view
-  Ø6.9mm / 1080p RES. / 77° angle view / [side view](#)

190 bending angle

2-way articulation probe bend angle up to 190(-10) degrees with 3d bend angle more than 360 degrees. his flexible design, make it easy to inspect hard to reach areas.



more than 360°

Ø6 x 10mm short camera head!

The camera diameter is 6mm and the length is 10.4mm. A short tube head can help you to inspect hard reachable places or angles.



High brightness LED & dimmer

With 6 high-brightness LEDs, the camera can capture clear images in a completely dark environment. Camera is equipped with dimmer function to control LED brightness for micro focal distance or long focal distance, to prevent exposure in micro focal distance. (IR 940nm & IR 850nm -optional)



1080p outstanding quality & UVC signal output !

1080p full hd resolution and uvc signal output. Compatible with pc, mac and android devices.



400p / 10-VD208-100-2x SERIES

Outer Diameter (mm)	Ø2.8	
Resolution	400 x 400 @ 30fps	
Camera head material	stainless steel	
Probe length	1M	
Probe length material	outer braid and stainless steel	
Articulations	2 way articulations	
Bending section length(mm)	17.8 mm	
Radius of gyration (at angle 90°)	24 mm	
UVC format	MJPEG / YUV	
Image area	741 µm x 707 µm	
Sensitivity	1000 mV/Lux-sec	
Dynamic range	67.1 dB @ 8x gain	
Lens (specify when ordering)	91° lens	0.5mm/F3.6 (D=91°)
	120° lens	0.418mm/F5.0 (D=120°)
LED dimmer	support	
Snapshot & Freeze Function	support	
Camera setting on smartphone	support	
Compatibility with wifi DVR	support	
Power source	DC 5V (USB) / 190mA	
Storage temperature	-30 to 60 Degree C	
Working temperature	-10 to 45 Degree C	
Operating system	Windows XP, windows Vista, window 7, windows 8, windows 10, Linux, MAC OSX	

Ø2.8mm Ultra Tiny Camera Head!

The camera diameter is 2.8mm and the length is 10.8mm. A tiny tube head can help you to inspect hard reachable places or angles.



High brightness LED & Dimmer

With 4 high-brightness LEDs, the camera can capture clear images in a completely dark environment.



10-VD208-100-2L-91

Model	View Angle	Interface	* LED (high-intensity)	Control Type
10-VD508-100-2L-91	91°	USB 2.0	4 pcs	lever
10-VD508-100-2L-120	120°	USB 2.0	4 pcs	lever
10-VD508-100-2W-91	91°	USB 2.0	4 pcs	turntable
10-VD508-100-2W-120	120°	USB 2.0	4 pcs	turntable

Cable	Connector	Camera type	Resolution	Controller type	Lens angle
10 Nylon braided sleeving	VD USB 2.0 type A	208 Color	100 400p	2L 2 way / Lever	91 91°
	VM Micro USB B			2W 2 way / Turnable	
	VT USB 2.0 type C				
	VO RCA-M / DC-F (CVBS single)				

720p / 10-xVD408-164-2x SERIES

Outer Diameter (mm)	Ø4.2 (TBD)	
Resolution	1280 x 720 @ 30fps / 60fps (optional)	
Camera head material	stainless steel	
Probe length	1.5M	
Probe length material	outer braid and stainless steel	
Articulations	2 way articulations	
Bending section length(mm)	17.8 mm	
Radius of gyration (at angle 90°)	24 mm	
UVC format	MJPEG / YUV	
Image area	1.12 µm x 1.12 µm	
Sensitivity	TBD	
Dynamic range	TBD	
Lens (specify when ordering)	65° lens	1.32mm/F3.5 (D=65°)
	120° lens	0.418mm/F5.0 (D=120°)
LED dimmer	support (high-intensity white LED: 6pcs)	
Snapshot & Freeze Function	support	
Camera setting on smartphone	support	
Compatibility with wifi DVR	support	
Power source	DC 5V (USB) / 190mA	
Storage temperature	-30 to 60 Degree C	
Working temperature	-10 to 45 Degree C	
Operating system	Windows XP, windows Vista, window 7, windows 8, windows 10, Linux, MAC OSX	

10-VD408-164-2L-65

Cable	Connector	Camera type	Resolution	Controller type	Lens angle
10 Nylon braided sleeving	VD USB 2.0 type A	408 Color	164 720p	2L 2 way / Lever	65 65°
	VM Micro USB B				120 120°
	VT USB 2.0 type C				
	SVD USB 3.0 type A				
	SVT USB 3.0 type C				

720p / 10-VD408-209-2x SERIES

Outer Diameter (mm)	Ø4.2	
Resolution	1280 x 720 @ 30fps	
Camera head material	stainless steel	
Probe length	2M	
Probe length material	outer braid and stainless steel	
Articulations	2 way articulations	
Bending section length(mm)	TBD	
Radius of gyration (at angle 90°)	TBD	
UVC format	MJPEG / YUV	
Image area	1.4 µm x 1.4 µm	
Sensitivity	585 mV/(Lux-sec)	
Dynamic range	68.4dB @16x gain	
Lens (specify when ordering)	76° lens	1.32mm/F3.5 (D=76°)
	128° lens	1.0mm/F4.8 (D=128°)
	140° lens	F4.0 (D=140°)
LED dimmer	support (high-intensity white LED: 6pcs)	
Snapshot & Freeze Function	support	
Camera setting on smartphone	support	
Compatibility with wifi DVR	support	
Power source	DC 5V (USB) / 190mA	
Storage temperature	-30 to 60 Degree C	
Working temperature	-10 to 45 Degree C	
Operating system	Windows XP, windows Vista, window 7, windows 8, windows 10, Linux, MAC OSX	

10-VD408-209-2L-76

Cable	Connector	Camera type	Resolution	Controller type	Lens angle
10 Nylon braided sleeving	VD USB 2.0 type A VM Micro USB B VT USB 2.0 type C	408 Color	209 720p	2L 2 way / Lever 2W 2 way / Turnable	76 91°
					128 128°
					140 140°