Unit: ± 0.5 mm



Press Controller
One-Way Articulation
1W Series



Joystick Controller
Four-Way Articulations
4W Series



Lever Controller
Two-Way Articulations
2L Series



Knob Controller
Two-Way Articulations
2W Series

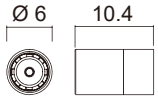
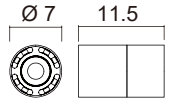
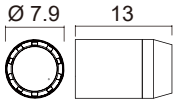
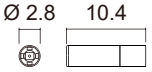
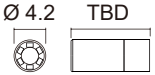
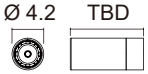
Application

- Vehicle repair and maintenance.
- Household cleaning & maintenance.
- Underwater exploration and observation.
- Pipeline investigation & maintenance.
- Fire rescue search.
- Large precision instrument detection.
- Inspection of hard-to-reach and hard-to-see places.

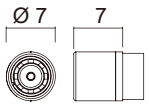
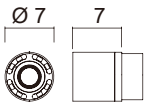
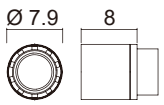
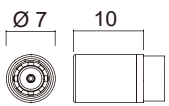
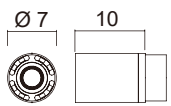
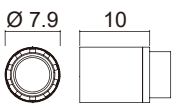
Specification

Series		100	164	209	311	363
Resolution		Half-VGA	1 MP	1 MP	2 MP	5 MP
Dimension (mm)		Ø 2.8	Ø 4.2	Ø 4.2	Ø 6~7.9	Ø 6~7.9
Interface	USB 2.0	✓	✓	✓	✓	✓
	USB 3.0	N/A	✓	N/A	✓	✓
UVC Format	H.264	N/A	N/A	N/A	✓	N/A
	MJPEG	✓	✓	✓	✓	✓
	YUV	✓	✓	✓	✓	✓
Articulation	One-Way Rigid Tube Length 45.6 cm / Bending Angle 180º					
	Radius Of Gyration (mm)	N/A	N/A	N/A	28 / 35	28 / 35
	Bending Length (mm)	N/A	N/A	N/A	33	33
	Two-Way Tungsten Wire Braided Sleeving 200 cm / Bending Angle 190º Four-Way Tungsten wire Braided Sleeving 200 cm / Bending Angle 135º					
	Radius Of Gyration (mm)	17.8	TBD	TBD	38	38
	Bending Length (mm)	24	TBD	TBD	43	43
Image Sensor		1/18”	1/11”	1/9”	1/6”	1/5”
Image Area (mm)		0.714 x 0.707	1.446 × 0.91	1.819 × 1.033	2.788 x 1.5498	2.90 x 2.18
Pixel Size (µm)		1.75 x 1.75	1.116 × 1.116	1.4 × 1.4	1.4 x 1.4	1.12 x 1.12
Power Source		DC 5V				
Power Current		190 mA				
Focus Distance (mm)		FID 45-20-70				
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				

Two / Four-Way Articulation

Series	311 (2 MP) / 363 (5 MP)		
Lens	77 / 81	88, 93 / 94, 99	158 / 169
Drawing			
Series	100 (Half-VGA)	164 (1 MP)	209 (1 MP)
Lens	120	120	76
Drawing			

One-Way Articulation

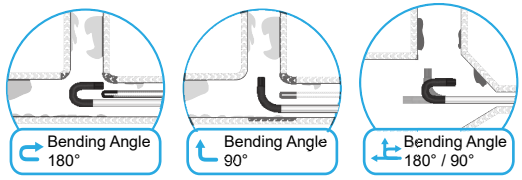
Series		311 (2 MP) / 363 (5 MP)		
Lens		77 / 81	88, 93 / 94, 99	158 / 169
ROG	Short			
	Long			

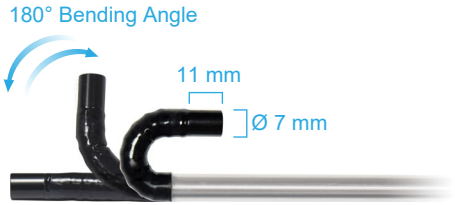
One-Way Articulation

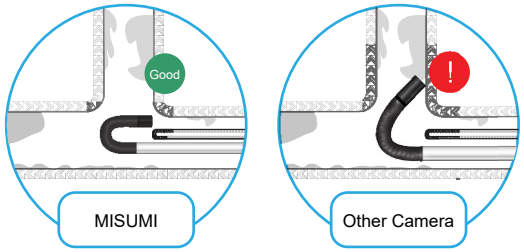


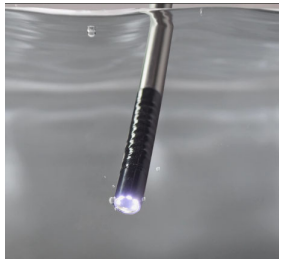






















Locked / Unlocked Camera Head!

Flexible control of camera articulation angle can be locked / unlocked at any angles by using the press controller.

Two Materials of Camera Cable

Different material for different application.
- Tungsten wire braided sleeving
- Steel Tube

180 Degree Bending Angle!

180 Degree bending angle makes it easier to inspect!

High Brightness LED & Dimmer

With high-brightness LED, 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 - specify when ordering)

Short Camera Head!

Camera diameter is 7mm and length is 11mm.
Short tube head helps to inspect hard-to-reach places or angles.

Waterproof IP 68

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

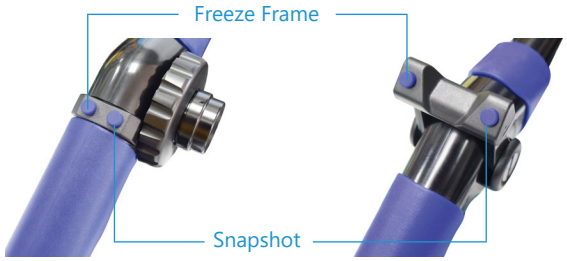
Two-Way Articulation













Two Types of Two-Way Articulation Borescope.

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

190° Bending Angle

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

Waterproof IP 68

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.

Ø 6 x 10.4 mm Short Camera Head!

Camera diameter is 6 mm. Length is 10.4 mm.
A short tube head can helps to inspect hard-to-reach places or angles.

Freeze Frame & Snapshot Function

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

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

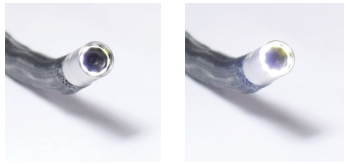
High Brightness LED & Dimmer

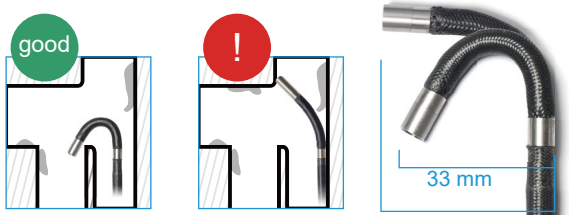
With high-brightness LED, the camera can capture clear images in a completely dark environment.
Camera is equipped with dimmer function to control LED brightness for micro focal distance or long focal distance, to prevent exposure in micro focal distance.
(IR 940nm & IR 850nm - specify when ordering)

Four-Way Articulation















Four-Way Articulation Borescope.

Use joystick to control camera head direction: up, down, left, right.
4-way articulation to bend angle up to 135 degrees with rotation angle up to 360 degrees. Makes it easy to inspect hard-to-reach areas.

Bending Rotation Up To 360 Degrees.

When bending at 135 degree angle, camera head can turn 360 degree.
Makes inspection more flexible and more accurate!

Freeze Frame & Snapshot Function

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

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

High Brightness LED & Dimmer

With high-brightness LED, 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 - specify when ordering)

Waterproof IP 68

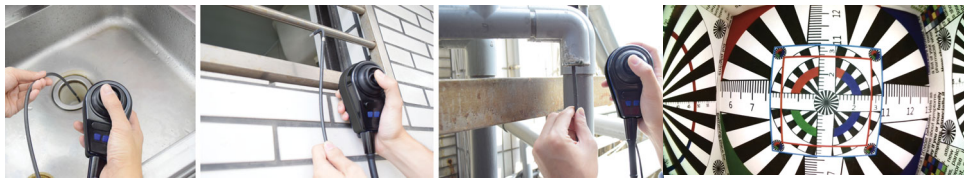
Protected from total dust ingress.
Protected from long term immersion and 1 meter in depth.

Ø 6 x 10.4 mm Short Camera Head!

Camera diameter is 6 mm. Length is 10.4 mm.
A short tube head can helps to inspect hard-to-reach places or angles.

Unlock & Lock to Control Camera Head!

Turn the joystick to flexibly control camera articulation angle.
Articulation angle can be locked / unlocked at any degree.





Two / Four-Way articulation

Select the camera type according to the specifications.

	O.D	Resolution	View Angle	Orientation
	Ø 2.8	Half-VGA	120º	Front view
	Ø 4.2	1 MP	76º	Front view
	Ø 6	2 MP / 5 MP	77º / 81º	Front view
	Ø 7	2 MP / 5 MP	88º / 94º	Front view
	Ø 7.9	2 MP / 5 MP	158º / 169º	Front view
	Ø 6.9	2 MP	77º	Side view

All MISUMI UVC Camera are Compatible With MP-WF580KP (WiFi DVR)

For example:
Our extremely lightweight 1920 x1080 (1080p) 1/6" CMOS UVC glasses camera is compatible with MP-WF580KP (WiFi DVR).

Supports H.264 video format input, loop recording, snapshot functions.
Supports max memory 128 GB (micro SD).

Users can view live streaming video via a smartphone.



Omni-Viewer



Android



iOS

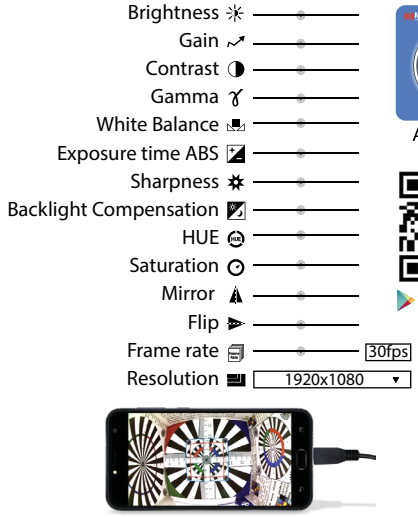



MP-WF580KP

About MP-WF580KP:
It deliver the best 1080p live streaming performance when using H.264 camera.
When using MJPEG cameras, it can only live stream at resolutions of 720p and below.
MJPEG cameras delivers the best live streaming performance at 640 x 480 resolution.

Camera Parameter Adjustable (MISUMI APP)

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



NOTE for MISUMI APP:
UVC Camera does not support Android 10

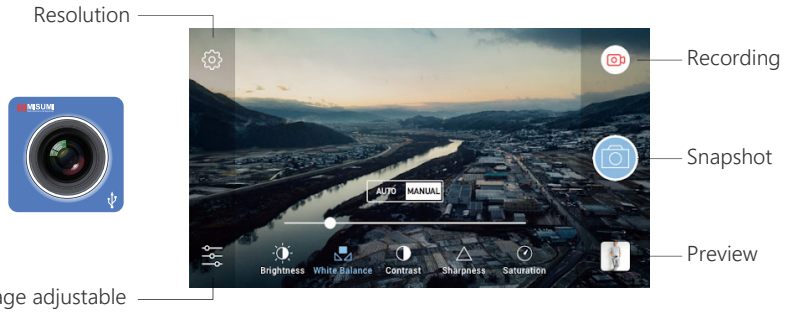
Preview On Android Device

1. Connect android devices

Mobile



2. Download "Aim Scope" from Google Play Store and install on android device.
(https://play.google.com/store/apps/details?id=com.infibi.aimscope)



PC Requirements

- Driver free (USB Video Class) for any OS
  (Win 10, Win 8, Win7, Win XP, Linus, Android)
  Play & Plug with USB Video Class

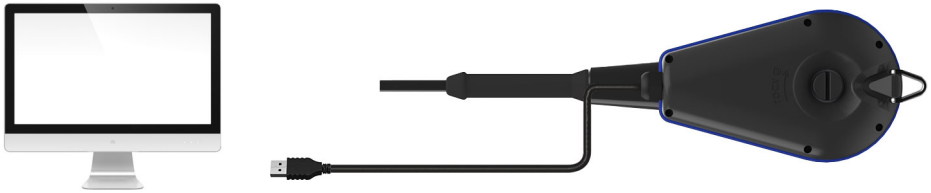
- Camera parameter can be adjusted on smartphone
  via the Misumi app and PC viewer software AMCAP.
  AMCAP: https://amcap.en.softonic.com/



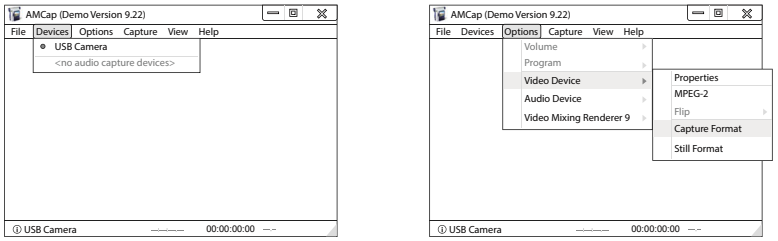
AMCAP

Preview on PC (Windows)

1. Please download camera viewer on PC.
   for example: amcap trial free version: https://amcap.en.softonic.com/
2. Camera connector with PC (driver free).

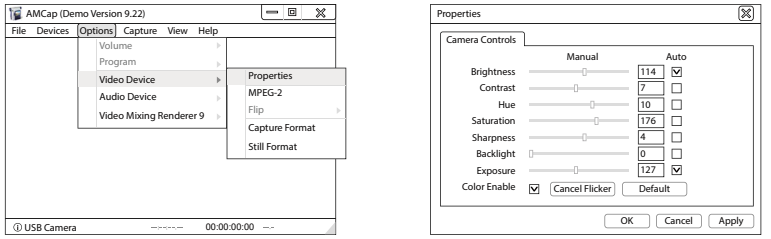


3. To preview the camera image running AMCAP software, click “Device” Select “USB Camera”.
4. To adjust the camera video format click "Option" then select "Video Device" -> "Capture Format".
   (Click "Option" ->video capture pin for amcap version 9.21)



(Lmage from Amcap Version 9.22)

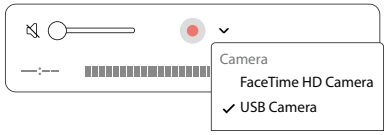
5. To adjust the camera image click "option" then select "Video Device" -> "Properties".



Preview on PC (IOS)

1. Running “Quicktime Player”





10-SVD408-164-2W-120

CABLE	INTERFACE	VIDEO FORMAT	CONNECTOR	PROBE O.D	DISPLAY	SERIES	CONTROLLER	LENS
Two-Way **Four-Way** 10 Tungsten hose braided sleeving **One-Way** 80 Rigid tube	**All Series** N/A USB 2.0 **164 / 311 / 363** S USB 3.0	**All Interface** V MJPEG / YUV **311 / Interface 2.0** H MJPEG / YUV / H.264	D USB Type A M USB Micro Type B (OTG) T USB Type C I USB Mini Type B	**Two / Four-Way** 2 Ø 2.8 mm 4 Ø 4.2 mm **311 / 363** **Two / Four-Way** 6 Ø 6~6.9 mm 7 Ø 7~7.9 mm **One-Way** 7 Ø 7~7.9 mm	**Short ROG** 08 Color M8 B/W **Long ROG** 00 Color M0 B/W	100 Half-VGA 164 1 MP 209 1 MP 311 2 MP 363 5 MP	**Four-Way** 4W Joystick **Two-Way** 2L Lever 2W Knob **One-Way** 1W Press	**Code / Angle** / **Specification** 91 — 0.5 mm / F 3.6 120 — 0.418 mm / F 5.0 120 — 0.878 mm / F 5.0 76 — 1.32 mm / F 3.5 128 — 1.00 mm / F 4.8 140 — 0.92 mm / F 4.5 **311** **Code / Angle** — **Specification** 77 — 1.83 mm / F 5.0 88 — 1.55 mm / F 5.7 93 — 1.5 mm / F 5.7 158 — 1.523 mm / F 4.8 **363** **Code / Angle** 81 94 99 169

* **Probe OD 6 and OD 7** for 311 / 363 only
* **ROG** Radius of Gyration