



Right :UFL-165AD
Left :UWL-105AD
Center:UCL-165AD

Underwater fish-eye is released!
Now INON offers full range of lightweight compact attachment lens for underwater photographers as:

AD Mount Series Attachment Lens

Fully support 165° Fish-eye ~ Ultra macro

Underwater Fish-eye Conversion Lens

■ INON UFL-165AD

- Maximum angle of view underwater is 165.5° . Closest focusing distance is 0cm.
UFL-165AD allows you to shoot dynamic scenery or wide macro photo with greater depth of field or with vibrant perspective.
- Innovative compact size as attachment fish-eye converter.
As of other AD Mount Series Lens, UFL-165AD is equipped with bayonet system .
This bayonet system allows you to easily replace attachment lens underwater.

Wide Conversion Lens

■ INON UWL-105AD

- The amphibious wide conversion lens, UWL-105AD, gives 105.6° degree of maximum angle of view underwater for wide shot and 179° in land for fish-eye shot, yet its smaller size comparing with UFL-165AD.
- UWL-105AD enables to make full use of Wide Conversion Lens characteristics for Wide Macro shot regardless of being underwater or in land.

Close-up Lens

■ INON UCL-165AD

- Close-up lens is designed to be closer focal length for macro/close-up shot.
INON UCL-165AD offers compact body, easy handling and full compatibility with zooming range. You can never have vignetting even at wide side.
- UCL-165AD can be jointed to another UCL-165AD for higher magnification.
You can create image composition as you like depending on subject size or distance to subject.
※ Other AD Mount Series Lens can not be attached to UCL-165AD.
Vignetting at wide side with more than two UCL-165AD jointing.

AD Mount Base is necessary for attaching AD Mount Series Attachment Lens. AD Mount Base is uniquely designed for each manufacturer's housing. Please refer reverse side for detail.



Compatible housing :

Olympus	PT-031, PT-030, PT-029, PT-026, PT-024, PT-016, PT-014, PT-012
Canon	WP-DC80, WP-DC70, WP-DC50, WP-DC30, WP-DC900, WP-DC800, WP-DC700, WP-DC500, WP-DC300, WP-DC200s, WP-DC200, WP-DC100
Nikon	WP-CP4, WP-CP2, WP-CP1
Fuji Photo Film	WP-FXF10, WP-FX701
Sony	MPK-NA, MPK-WA, MPK-PHB

Accessories

A Multifunction Base not only for AD Mount Series Lens but also for external strobe installation

AD Mount Base

■AD Mount Base•PT-031
■AD Mount Base•PT-030
■AD Mount Base•PT-029
■AD Mount Base•PT-026
■AD Mount Base•PT-024
■AD Mount Base•PT-016
■AD Mount Base•PT-014
■AD Mount Base•PT-012
■AD Mount Base•PT-009
■AD Mount Base•DC80/70
■AD Mount Base•DC900/50
■AD Mount Base•DC800
■AD Mount Base•DC700/30
■AD Mount Base•DC300
■AD Mount Base•DC200/200s
■AD Mount Base•DC100/500
■AD Mount Base•CP4/2
■AD Mount Base•CP1
■AD Mount Base•FXF10
■AD Mount Base•FX701
■AD Mount Base•NA
■AD Mount Base•WA
■AD Mount Base•PHB

(※)

AD Mount Base is multifunctional base for simple and secure installation of accessories on compact digital camera, and main accessory for "Underwater Photography System". AD Mount Base is fixed to housing at its lens port and tripod tap hole. So accessories can be added on without overburden.

※ INON attachment lens is not compatible with PT-009. With attachment lens, there is vignetting on every image corners at wide end.

Installation of attachment lens

AD Mount Base employs bayonet system for its innovative "INON AD Mount". Underwater fish-eye conversion lens "UFL-165AD", wide conversion lens "UWL-105AD" or close-up lens "UCL-165AD" is easily attached and disattached. Needless to say, there is no affection on image with attachment lens off.

External strobe unit installation

AD Mount Base is equipped with diffuser panel on which "Optical D Cable Cap/ Set" can be directly mounted and enables to link with INON D-2000 series. Also "Grip Base DII with Rubber Grip D" can be directly mounted on AD Mount Base, which gives you easy and secure external strobe installation.



AD Mount Base • DC300



Optical D Cable/Cap W3 Set



Grip Base DII with Rubber Grip D

"Stress-free" lens handling underwater

AD Lens Holder

AD Lens Holder is to be attached on Grip Base DII or Grip Base DIII for carrying maximum two of AD mount series attachment lens. AD Lens Holder gives easy access to another AD lens underwater and helps to carry without possible dropping off. You can choose single or double carriage configuration at installation the accessory.

※ Maximum number of AD Lens Holder

Grip Base DII/DIII : 1 (single carriage configuration only), Arm SS : 1, Arm S : 1, Arm M : 2, Arm L : 3



※ AD Lens Holder on Arm S
Arm S is not included.



※ AD Lens Holder attached on Grip Base DII with Rubber Grip D
Only single configuration is available.

UFL-165AD/UWL-105AD Specifications/Compatibility

Housing	Camera	Focus Range						Vignetting [⑩]		
		without attachment lens(wide end) [⑧]		with UWL-105AD(wide end) [⑧]		with UFL-165AD(wide end) [⑨]		underwater(wide end)		air(wide end)
		Normal mode	Macro mode	Normal mode	Macro mode	Normal mode	Macro mode	UWL-105AD	UFL-165AD	UWL-105AD
PT-031[⑩]	SP-700	∞ ~ 30cm	∞ ~ 10cm	∞ ~ 5.6cm	∞ ~ 0.4cm	∞ ~ 0.7cm	∞ ~ 0cm	No vignetting	No vignetting	[⑦]
PT-030[⑩]	SP-350	∞ ~ 50cm	50cm ~ 20cm	∞ ~ 10.8cm	10.8cm ~ 3.0cm	∞ ~ 5.1cm	5.1cm ~ 0cm	No vignetting	No vignetting	No vignetting
PT-029[⑩]	μ -600	∞ ~ 50cm	∞ ~ 20cm	∞ ~ 10.8cm	∞ ~ 3.0cm	∞ ~ 5.1cm	∞ ~ 0cm	No vignetting	No vignetting	[④]
PT-026[⑩]	μ -40	∞ ~ 50cm	∞ ~ 20cm	∞ ~ 10.8cm	∞ ~ 3.0cm	∞ ~ 5.1cm	∞ ~ 0cm	No vignetting	No vignetting	[④]
PT-024[⑩]	X-3	∞ ~ 50cm	50cm ~ 20cm	∞ ~ 10.8cm	10.8cm ~ 3.0cm	∞ ~ 5.1cm	5.1cm ~ 0cm	No vignetting	No vignetting	[④]
PT-016[⑩]	μ -20, μ -10	∞ ~ 50cm	∞ ~ 20cm	∞ ~ 10.8cm	∞ ~ 3.0cm	∞ ~ 5.1cm	∞ ~ 0cm	No vignetting	No vignetting	[④]
PT-014[⑩]	X-2	∞ ~ 50cm	50cm ~ 20cm	∞ ~ 10.8cm	10.8cm ~ 3.0cm	∞ ~ 5.1cm	5.1cm ~ 0cm	No vignetting	No vignetting	[④]
	X-1	∞ ~ 50cm	50cm ~ 20cm	∞ ~ 10.8cm	10.8cm ~ 3.0cm	∞ ~ 5.1cm	5.1cm ~ 0cm	No vignetting	No vignetting	[⑦]
PT-012[⑩]	C-40Z	∞ ~ 80cm	80cm ~ 10cm	∞ ~ 18.9cm	18.9cm ~ 0.4cm	∞ ~ 11.7cm	11.7cm ~ 0cm	No vignetting	No vignetting	[④]
DC80[⑩]	IXY D700	∞ ~ 50cm	50cm ~ 5cm	∞ ~ 10.8cm	10.8cm ~ 0cm	∞ ~ 5.1cm	5.1cm ~ 0cm	No vignetting	No vignetting	No vignetting
DC70[⑩]	IXY D600	∞ ~ 50cm	50cm ~ 5cm	∞ ~ 10.8cm	10.8cm ~ 0cm	∞ ~ 5.1cm	5.1cm ~ 0cm	No vignetting	No vignetting	No vignetting
DC50[⑩]	A95	∞ ~ 45cm	45cm ~ 5cm	∞ ~ 9.7cm	9.7cm ~ 0cm	∞ ~ 4.0cm	4.0cm ~ 0cm	No vignetting	No vignetting	[⑦]
DC30[⑩]	A85,A75	∞ ~ 46cm	46cm ~ 5cm	∞ ~ 9.9cm	9.9cm ~ 0cm	∞ ~ 4.3cm	4.3cm ~ 0cm	[⑤]	[⑤]	[④]
DC900[⑩]	A80	∞ ~ 45cm	45cm ~ 5cm	∞ ~ 9.7cm	9.7cm ~ 0cm	∞ ~ 4.0cm	4.0cm ~ 0cm	No vignetting	No vignetting	[⑦]
DC800[⑩]	IXY D500,D450,D400	∞ ~ 46cm	46cm ~ 5cm	∞ ~ 9.9cm	9.9cm ~ 0cm	∞ ~ 4.3cm	4.3cm ~ 0cm	No vignetting	No vignetting	[④]
DC700[⑩]	A70,A60	∞ ~ 46cm	46cm ~ 5cm	∞ ~ 9.9cm	9.9cm ~ 0cm	∞ ~ 4.3cm	4.3cm ~ 0cm	[⑤]	[⑤]	[④]
DC500[⑩]	IXY D300a	∞ ~ 76cm	76cm ~ 16cm	∞ ~ 17.6cm	17.6cm ~ 2.0cm	∞ ~ 10.6cm	10.6cm ~ 0cm	No vignetting	No vignetting	[④]
DC300[⑩]	S50,S45	∞ ~ 50cm	50cm ~ 10cm	∞ ~ 10.8cm	10.8cm ~ 0.4cm	∞ ~ 5.1cm	5.1cm ~ 0cm	No vignetting	No vignetting	[④]
	S40,S30	∞ ~ 80cm	80cm ~ 10cm	∞ ~ 18.9cm	18.9cm ~ 0.4cm	∞ ~ 11.7cm	11.7cm ~ 0cm	No vignetting	No vignetting	[④]
DC200s[⑩]	A40,A30	∞ ~ 76cm	76cm ~ 16cm	∞ ~ 17.6cm	17.6cm ~ 2.0cm	∞ ~ 10.6cm	10.6cm ~ 0cm	No vignetting	No vignetting	[④]
	A20,A10	∞ ~ 76cm	76cm ~ 16cm	∞ ~ 17.6cm	17.6cm ~ 2.0cm	∞ ~ 10.6cm	10.6cm ~ 0cm	No vignetting	No vignetting	[④]
DC200[⑩]	A20,A10	∞ ~ 76cm	76cm ~ 16cm	∞ ~ 17.6cm	17.6cm ~ 2.0cm	∞ ~ 10.6cm	10.6cm ~ 0cm	No vignetting	No vignetting	[④]
DC100[⑩]	IXY D300	∞ ~ 76cm	76cm ~ 16cm	∞ ~ 17.6cm	17.6cm ~ 2.0cm	∞ ~ 10.6cm	10.6cm ~ 0cm	No vignetting	No vignetting	[④]
CP4[⑩]	E7900,E5900	∞ ~ 30cm	∞ ~ 4cm	∞ ~ 5.6cm	∞ ~ 0cm	∞ ~ 0.7cm	∞ ~ 0cm	No vignetting	No vignetting	[④]
CP2[⑩]	E5200,E4200	∞ ~ 30cm	∞ ~ 4cm	∞ ~ 5.6cm	∞ ~ 0cm	∞ ~ 0.7cm	∞ ~ 0cm	No vignetting	No vignetting	[④]
CP1[⑩]	E4100	∞ ~ 30cm	∞ ~ 4cm	∞ ~ 5.6cm	∞ ~ 0cm	∞ ~ 0.7cm	∞ ~ 0cm	No vignetting	No vignetting	[④]
	E3200,E2200	∞ ~ 30cm	∞ ~ 4cm	∞ ~ 5.6cm	∞ ~ 0cm	∞ ~ 0.7cm	∞ ~ 0cm	No vignetting	No vignetting	[④]
FXF10[⑩]	F11	∞ ~ 60cm	80cm ~ 5cm	∞ ~ 13.5cm	18.9cm ~ 0cm	∞ ~ 7.3cm	11.7cm ~ 0cm	No vignetting	No vignetting	No vignetting
	F10	∞ ~ 60cm	80cm ~ 7.5cm	∞ ~ 13.5cm	18.9cm ~ 0cm	∞ ~ 7.3cm	11.7cm ~ 0cm	No vignetting	No vignetting	No vignetting
FX701[⑩]	F810,F710	∞ ~ 60cm	80cm ~ 7.5cm	∞ ~ 13.5cm	18.9cm ~ 0cm	∞ ~ 7.3cm	11.7cm ~ 0cm	WIDEmode:No vignetting	WIDEmode:No vignetting	WIDEmode:[④]
								STDmode:[⑪]	STDmode:[⑪]	STDmode:[④]
NA[⑩]	N1	∞ ~ 50cm	∞ ~ 6cm	∞ ~ 10.8cm	∞ ~ 0cm	∞ ~ 5.1cm	∞ ~ 0cm	No vignetting	No vignetting	[④]
WA[⑩]	W7,WS,W1	∞ ~ 50cm	∞ ~ 6cm	∞ ~ 10.8cm	∞ ~ 0cm	∞ ~ 5.1cm	∞ ~ 0cm	No vignetting	No vignetting	[④]
PHB[⑩]	P150	∞ ~ 50cm	∞ ~ 6cm	∞ ~ 10.8cm	∞ ~ 0cm	∞ ~ 5.1cm	∞ ~ 0cm	No vignetting	No vignetting	No vignetting
	P100	∞ ~ 60cm	∞ ~ 6cm	∞ ~ 13.5cm	∞ ~ 0cm	∞ ~ 7.3cm	∞ ~ 0cm	No vignetting	No vignetting	No vignetting

AD Mount Series Lens Specification ①

Lens Type	Close-up Lens	Wide Conversion Lens	Underwater Fish-eye Conversion Lens
Model	UCL-165AD	UWL-105AD	UFL-165AD
Outer diameter/ length	φ 64.5mm / 27.7mm	φ 78mm / 49mm	φ 114mm / 86.5mm
Weight(land/ underwater) ②	70g / 35g approx.	276g / 142g approx.	440g / 85g approx.
Lens construction	2 groups 2 elements	4 groups 4 elements	4 groups 4 elements
Focal Length (u/w / land)	165mm/135.4mm	∞ / ∞ (afocal system)	∞ / ∞ (underwater afocal system)
Magnification ③	----	0.51	0.405
Maximum Incident View Angle ①	----	105.6° (underwater) / 179° (air)	165.5° (underwater)
Material / Surface	Corrosion resistant aluminum alloy/ Rigid black alumite	Corrosion resistant aluminum alloy/ Rigid black alumite	Corrosion resistant aluminum alloy/ Rigid black alumite
Lens material / Coating	Optical glass / inner coating	Optical glass / both side coating	Optical glass / both side coated Optical plastic/Outer hard coating
Mount System	INON AD Mount	INON AD Mount	INON AD Mount
Practical Depth Rating	60m	60m	60m

[①] Price and specification is subject to change without prior notice.

[②] With lens hood

[③] UFL-165AD/UWL-105AD performance itself (telescopic magnification : ν).

[④] Slightly vignetting in image corners. Slightly zoom to telephoto side or crop the image.

[⑤] Extremely minute vignetting part in one of image corners at wide end when using "UFL-165AD" / "UWL-105AD" underwater.

[⑥] Extremely minute vignetting part in one or two of image corners at wide end when using "UFL-105AD" in air.

[⑦] Vignetting possibility to be examined.

[⑧] Actual distance in land (=visual measurement underwater). For actual distance underwater, multiply 1.33 by actual distance land.

[⑨] Actual distance underwater. For visual measurement, divide by 1.33.

[⑩] View of angle and vignetting may vary depending on a housing to be used, even with same camera.

[⑪] When using "UFL-165AD" at wide side with open aperture, light amount at circumference part may be slightly short. This symptom can be eased by closing aperture.

[⑫] When using S50/S45/S40/S30 + WP-DC300. Actual view angle may vary depending on camera/housing.