

AM4815ZT



Innovate to meet most challenges. Adding to the high image quality of Dino-Lite Edge, the AM4815ZT with polarizer provides image processing features, EDOF and EDR, for further extending its limitation over depth of focus or dynamic range. AM4815ZT also has better adaptability to different applications with the detachable and exchangeable front cap design.

Overview



High optical resolution

With the state-of-the-art lens design, the Dino-Lite Edges series delivers matchless image quality with stunning sharpness, least aberration, and least vignetting throughout the whole magnification range.



Convenient flexible magnification

The Dino-Lite is capable of variable magnification with a range of 20~220x depending of working distance by simply zooming in or out with just a rotating dial.



Extended Depth of Field (EDOF)

To view a rough surface with height range out of depth of focus, the AM4815T's EDOF capture mode can take several pictures at different focus and stack them automatically within a click. The resulted EDOF image maintains the picture quality from its original pictures which also can be reviewed in DinoCapture 2.0.



Extended Dynamic Range (EDR)

For high contrast or reflective surface, the EDR capture mode can help to reveal the details of dark or bright areas, which may lost in normal capture mode, by stacking images taken at different exposure levels.



Adaptable cap design

This model features a detachable and interchangeable front cap that extends its range of use, as different caps are available for various applications. Removing the front cap provides greater working distance and access to the full magnification range.



Polarizer

To many applications, it is inevitable to have reflection on the surface resulting from the built-in illumination. The freely adjustable polarizer helps to reveal more detail or to enhance the contrast on the surface by reducing or eliminating the reflections. For applications such as optical mineralogy requiring transmitted polarizing illumination, the Dino-Lite back-light pad (BL-ZW1) is optional to be used with all Dino-Lite polarizer models.

Interchangeable Front Caps



N3C-D / Diffuser Cap

This cap diffuses the LED light.



N3C-D2 / Opal Diffuser Cap

This cap diffuses the LED light.



N3C-E / Extended Open Cap

Dino-Lite Edge (stand type) will focus at approximately 200x when the cap touches surface.



N3C-L / Long Cap

This cap is useful to adjust the working focus of Dino-Lite Edge at lower magnification.



N3C-O / Open Cap

This is the standard cap for normal usage.



N3C-S / Sidelight Cap

This cap creates images with more depth and texture.



N3C-C / Close Cap

This cap protects the lens and LED lights from contamination of dust, debris, or moisture.

Information about working distance and field of view

M	WD	FOV (x)	FOV (y)	DOF
20	60.2	19.5	15.6	2.5
30	33.5	13	10.4	1.8
40	20.9	9.8	7.8	1.5
50	13.9	7.8	6.3	
60	9.7	6.5	5.2	
70	7.1	5.6	4.5	1.0
80	5.5	4.9	3.9	
90	4.5	4.3	3.5	
100	4.1	3.9	3.1	
110	4	3.6	2.8	
120	4.1	3.3	2.6	
130	4.5	3	2.4	
140	5	2.8	2.2	
150	5.6	2.6	2.1	
160	6.3	2.4	2	
170	7.1	2.3	1.8	
180	8	2.2	1.7	
190	8.9	2.1	1.6	
200	9.9	2	1.6	
210	10.9	1.9	1.5	
220	11.9	1.8	1.4	0.1

M = magnification rate WD = working distance (without front cap) FOV = field of view DOF = depth of field Unit = mm

Specification

Model : AM4815ZT Dino-Lite Edge

Interface : USB 2.0

Product Resolution : 1.3M pixels (SXGA)

Magnification Rate : 20x~220x

Sensor : Color CMOS

Frame Rate : Up to 30fps

-Save Formats:

+Image:

DinoCapture2.0: BMP, GIF, PNG, MNG, TIF, TGA, PCX, WBMP, JP2, JPC, JPG, PGX, RAS, PNM

DinoXcope: PNG, JPEG

+Movie:

DinoCapture2.0: WMV, FLV, SWF

DinoXcope: MOV

Microtouch : Touch sensitive trigger on the microscope for taking pictures

Lighting : 8 white LED lights switched on/off by software

Measurement Function : Yes

Calibration Function : Yes

Operating System Supported : Windows 10, 8, 7, Vista, XP;

Mac OS 10.9 or later (EDOF/EDR are NOT controllable on Mac OS)

Unit Weight : 100g

Unit Dimension : 10.5 cm (H) x 3.2 cm (D)

Package Dimensions : 16cm (L) x 16cm (W) x 6cm (H)

Gallery



EDR vs. without EDR



Comparison of full polarization vs. no polarization using EDR



EDOF with a butterfly



EDOF with stacked chips



EDOF on a watch



EDOF for part inspection