

AM83917MZTL

Dino-Lite Edge^{PLUS} USB 3.0



Designed to support complex long-working-distance tasks, the 8-megapixel AM83917MZTL utilizes high-speed USB 3.0 to deliver fluid, uncompressed high-fidelity YUY2 imaging which enables a finer and more comprehensive view of the target. Beyond image fidelity, EDOF, DPQ, EDR, eFLC, an adjustable polarizer, and AMR are seamlessly integrated into a sophisticated imaging platform for reliable inspection, analysis, and documentation.

Overview

High-Speed Transmission

The USB 3.0 interface enables smooth, responsive live imaging in uncompressed YUY2 with immediate visual feedback, while preserving crisp edge definition and subtle color gradation. Frame rates reach up to 15 fps at 8 MP and 60 fps at 2 MP.

High Quality Optics

The optics adopted in the Edge series reveal the finest details, answering the needs of the most demanding microscopy applications.

8 Megapixel

This high-resolution sensor combines 8-megapixel resolution with enhanced low-light performance, natural-looking color reproduction, and well-defined image contrast, delivering detailed 3840 × 2160 imaging in a 16:9 format.

Long Working Distance (LWD) Optics

The LWD optics yield more working space between the object and the microscope, making it ideal for applications such as repair or assembly.

Adjustable Polarizer

The built-in adjustable polarizer removes unwanted reflection or glare from the object's surface for better contrast.

Enhanced Flexible LED Control (eFLC)

Improving FLC capabilities, the eFLC can adjust the light intensity on two assigned groups of LED quadrants, each with a 32-level light intensity adjustment.

Depth Acquisition (DPQ)

The delicate focus control of this model allows for the acquisition of more accurate depth information.

Extended Depth of Field (EDOF)

Viewing rough surfaces with height ranges out of depth of focus, the EDOF can take several images at different focuses and stack them automatically within a click.

Extended Dynamic Range (EDR)

Observing high contrast or reflective surfaces, the EDR can help to reveal the details of dark or bright areas by stacking images taken at different exposure levels.

Auto and Manual Refocus

Using mouse inputs, the refocusing capability helps fine-tune the focus, either automatically by clicking at the point of interest or manually by scrolling the mouse.

Automatic Magnification Readout (AMR)

The Automatic Magnification Readout (AMR) detects the magnification in use, eliminating manual input errors and enhancing measurement accuracy in tasks with frequent magnification adjustments.

Robust Metal Housing

The anodized aluminum alloy housing offers durability and EMI shielding, effectively guarding against impacts, abrasions, and electromagnetic noise.

Optical Data Table

Mag	WD	FOV (x)	FOV (y)	DOF
10x	237.3	60.69	34.14	25.80
20x	115.1	30.35	17.07	6.89
30x	75.8	20.23	11.38	3.49
40x	57.2	15.17	8.53	2.22
50x	46.9	12.14	6.83	1.59
60x	40.7	10.12	5.69	1.22
70x	36.9	8.67	4.88	0.98
80x	34.5	7.59	4.27	0.81
90x	33.2	6.74	3.79	0.69
100x	32.5	6.07	3.41	0.60
110x	32.3	5.52	3.10	0.53
120x	32.5	5.06	2.84	0.48
130x	33.0	4.67	2.63	0.43
140x	33.8	4.34	2.44	0.39

Unit = mm

Mag: Magnification

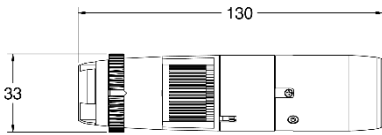
WD: Working Distance - The distance between the tip of the Dino-Lite (without cap) and the object being observed.

FOV: Field of View

DOF: Depth of Field

Specification

Model	AM83917MZTL
Series	Dino-Lite Edge ^{PLUS} USB 3.0
Interface	USB 3.0 (Type-C)
Full Resolution	8 Megapixel (3840 x 2160)
Sensor Size	1/2.8"
Magnification	Adjustable, 10x ~ 140x
Frame Rate	15 fps at 8 MP, YUY2 60 fps at 2 MP, YUY2
System Requirements	CPU: Intel Core i5 6th Gen or higher AMD Ryzen 5 1000 series or higher Memory: 8 GB RAM or more Storage: 150 MB available space or more
Operating System	Windows 10/11
Power Input	5V, 0.9A
Saving Format	Image: DinoCapture 2.0: BMP, PNG, TIF, JPG DinoCapture 3.0: BMP, PNG, TIF, JPG Video: DinoCapture 2.0: WMV, FLV, SWF DinoCapture 3.0: MP4
Measurement Function	Yes
Calibration Function	Yes
Focus Knob	Yes
Scroll Lock	Yes
Microtouch	Yes
Illumination	White Light, 8 LEDs
Included Front Caps	N3C-C (Close Cap) N3C-D (Diffuser Cap) N3C-D2 (Opal Diffuser Cap) N3C-E (Extended Open Cap) N3C-L (Long Cap)

	N3C-O (Open Cap) N3C-S (Sidelight Cap)
Included Cables	Type-C to Type-C Cable with Screw Lock (1.8 m) Type-C to Type-A Cable with Screw Lock (1.8 m)
Unit Dimension	130 mm (H) x 33 mm (D) 
Unit Weight	Approx. 121 g