# Dino-Lite

Handheld Digital Microscope | Eyepiece Camera | Accessories



*Redefine the microscope*

# The Dino-Lite Glossary

## AXI - Axial Illumination

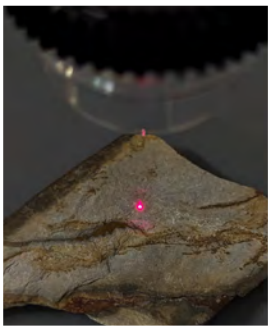
The AXI feature uses through-lens illumination to provide switchable coaxial lighting for examining reflective surfaces. It can be used to highlight or increase the contrast of patterns, defects, or surface features on a variety of materials, such as semiconductors, glass, and metal.




IC lead frame viewed at 210x magnification.

## APL - Aim Point Laser

APL is a through-lens laser that casts a red dot visible on the sample and live image. This helps to position a point of interest under the microscope's field of view. The Dino-Lite equipped with APL is classified as a Class 1 laser product that is non-hazardous for normal use.



APL projecting on metamorphic rock.

## AMR - Automatic Magnification Reading

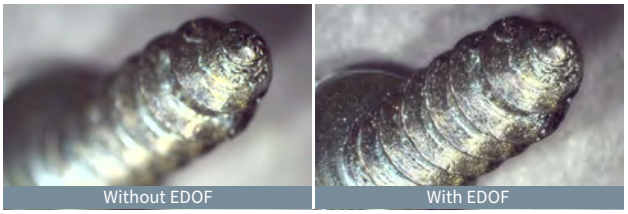
AMR is a feature that detects the current magnification of a Dino-Lite in use. The tracked magnification eliminates human error when reading and entering the magnification value, improving the efficiency and accuracy of measurements.

## DPQ - Depth Acquisition

DPQ is a feature that leverages the microscope's small depth of field to extract depth or height by comparing the focus of a position with a reference. It provides an indirect yet effective way of obtaining depth information from surfaces that exhibit topographical variations.

## EDOF - Extended Depth of Field

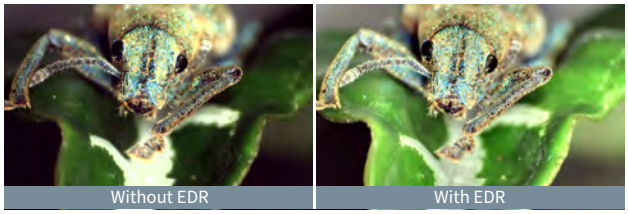
EDOF creates images with a wider depth of field by stacking multiple images at different focal depths with one click. This results in a clear view of objects with topography changes in height.




Screw captured at 35x magnification.

## EDR - Extended Dynamic Range

EDR is a feature that creates images with a wider dynamic range by stacking multiple images at different exposure levels with one click. This allows details to be more visible in areas that may have been too bright or too dark in a single exposure.




Phyllobius calcaratus captured at 30x magnification.

## FLC - Flexible LED Control

Shadows can be useful in microscopy when they are used to reveal surface features such as depth and height variations in a sample. FLC provides on/off switching capability of each quadrant and 6-level intensity adjustability of activated quadrants, enabling the creation of shadows by uneven lighting. It can be useful for highlighting surface features and topographical variations or enhancing contrast without using auxiliary side lighting.

## eFLC - enhanced Flexible LED Control

The eFLC added 32 levels of intensity adjustability to both the bright and dark quadrants of FLC. This allows to fill light in the shadows to avoid clipping and achieve better detail in photos.




Metamorphic rock viewed at 60x magnification.

## Polarizer

Polarizing Dino-Lite microscopes have two linear polarizers: one in front of the LEDs that can rotate and another in the optical pathway to the sensor. On its own, it can be used as reflective polarizing light microscopy to suppress glare for better contrast or perform subsurface examinations. Used with a polarizer backlight, such as the BL-ZW2, it can be used as transmitted polarizing microscopy for thin film or petrography examinations.

## Magnification

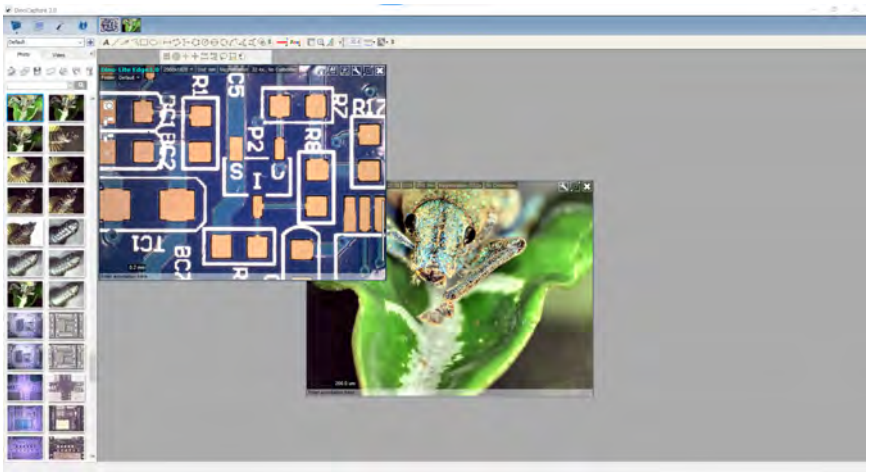
In digital microscopy, magnification is calculated by dividing the size of the image displayed on the screen by the actual size of the specimen being viewed. The Dino-Lite's magnification uses a 4:3 20-inch full screen display for the calculation.

# Software

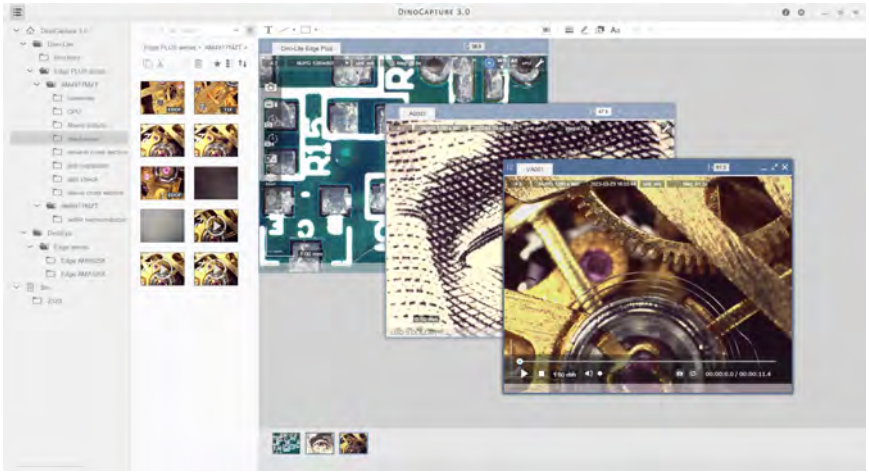
Dino-Lite and Dino-Eye devices require software for controlling various functions, including illumination and camera settings. Softwares are available with Windows or MacOS. Additionally, there are dedicated apps for Android and iOS mobile devices, which allow users to stream images through a Wi-Fi steamer for convenient on-the-go usage.

## DinoCapture for Windows

DinoCapture is a Windows imaging software for USB Dino-Lite microscopes used in many applications, from industrial to educational to research. It allows users to preview multiple cameras, adjust the camera and LED settings, capture images and videos, add text and drawings, perform measurements, and other special functions.



DinoCapture 2.0



Upcoming DinoCapture 3.0

## DinoConnect for iOS & Android

DinoConnect is an imaging app designed to be used with a Dino-Lite connected via a dedicated Wi-Fi streamer for fieldwork and outdoor applications. This app allows users to preview live images, control illumination and exposure, take photos, record videos, add texts, and perform measurements on a mobile device.




DinoConnect 2

## DinoXcope for macOS

DinoXcope is a functional software for using Dino-Lite on macOS. With features like image and video capture, editing tools, measurements, and more, DinoXcope provides users the essentials for live imaging and documentation.

## SDK

The software development kit (SDK) allows the integration of Dino-Lites into the customer's own system. The package provides controlling capabilities for the camera and LEDs of Dino-Lites. SDK is compatible with Windows in 32-bit OS or 64-bit OS versions. Contact your local distributor for more information.

# Accessories

## Wi-Fi Streamer

### WF-20



Modular Wi-Fi streamer compatible with Dino-Lite AF series

### WF-10



Wi-Fi streamer compatible with a wide selection of Dino-Lites

## Rack

### RK-10



General-purpose tabletop rack

### RK-02



Gooseneck rack

### MS-W1



Handy wheeled stand

### RK-06 / RK-06F*



Agile tabletop rack

* Fine-focus adjustment option

### RK-05 / RK-05F*



Tiltable rack

* Fine-focus adjustment option

### RK-04 / RK-04F*



Compact rack

* Fine-focus adjustment option

Fine-focus adjustment knob on RK-04F, RK-05F, and RK-06F



### Extension for RK-10 or RK-06



**RK-10-PX2**
XY positioning arm



**RK-10-FX**
Flexible arm extension



**SS-M2**
Petri dish holder

## Holder

### HD-M2A / HD-M2B



Metal holder with quick release screw

Vertical/horizontal mounting hole size: 10mm(A) or 1/2"(B)

## Front Cap

### N3C-R



Ring light cap

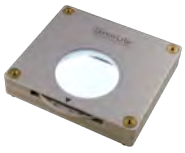
### N3C-A



Coaxial light cap

## Backlight

### BL-ZW2



Backlight with adjustable and removable polarizer

### BL-CDW



Backlight with bright field and dark field illumination

## Others

### KM-01



Knob motor for adjusting the focus knob remotely

### SW-F1



Foot pedal for triggering camera operations on software (DinoCapture)

To learn more about the complete range of accessories, please contact your local distributor or visit www.dino-lite.com.

# Product Selection Guide

## Dino-Lite Digital Microscope

| Resolution | Interface | Features: FLC | eFLC * | AMR | EDOF / EDR * | DPQ * | AXI | APL | Optional Wi-Fi Streamer | Datachable Cable | Part No. | Magnification (Working Distance): 10x ~ 220x (WD=59.5 ~ 11.3 mm) | 20x ~ 220x (WD=60.2 ~ 11.9 mm) | 10x ~ 140x (WD=234.5 ~ 30.5 mm) | 10x ~ 50x (WD=182 ~ 14 mm) | 10x ~ 70x (WD=503 ~ 108 mm) | 400x ~ 470x (WD=5.68 ~ 9.5 mm) | 415x ~ 470x (WD=6.0 ~ 11.8 mm) | 500x ~ 550x (WD=9.5 ~ 9.2 mm) | 700x ~ 900x (WD=6.4 ~ 5.9 mm) | 45x ~ 70x (WD=146 ~ 108 mm) | 70x ~ 140x (WD=38.6 ~ 35.4 mm) | 130x ~ 220x (WD=4.5 ~ 11.9 mm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Dino-Lite Edge[PLUS]** | | | | | | | | | | | | | | | | | | | | | | | |
| 8 MP | USB 2.0 | ● | | ● | ● | ● | | | | ● | **AM8917M** | ZT | | ZTL | | | ZT4 | | | T8 | | | |
| 8 MP | USB 2.0 | ● | | ● | | | | | | ● | **AM8517M** | ZT | | ZTL | | | | T4A | | T8A | | | |
| 8 MP | USB 2.0 | ● | | | | | | | | ● | **AM8117M** | ZT | | ZTL | | | | | | | | | |
| 1.3 MP | USB 2.0 | ● | | ● | ● | ● | | | | ● | **AM4917M** | ZT | | ZTL | | | ZT4 | | | T8 | | | |
| 1.3 MP | USB 2.0 | ● | | ● | | | ● | ● | | ● | **AM4517M** | ZT | | ZTL | | | | | | T8A | TFP | | |
| 1.3 MP | USB 2.0 | ● | | | | | | | | ● | **AM4117M** | ZT | | ZTL | ZTW | | | | | | | | |
| **Dino-Lite Edge 3.0** | | | | | | | | | | | | | | | | | | | | | | | |
| 5 MP | USB 3.0 | ● | | ● | ● | ● | | | | ● | **AM73915M** | ZT | | ZTL | | | ZT4 | | | T8 | | | |
| 5 MP | USB 3.0 | ● | | ● | | | ● | | | ● | **AM73515M** | ZT | | ZTL | | | | | | T8A | | | |
| 5 MP | USB 3.0 | ● | | | | | | | | ● | **AM73115M** | ZT | | ZTL | | TF | | | | | | | |
| **Dino-Lite Edge** | | | | | | | | | | | | | | | | | | | | | | | |
| 5 MP | USB 2.0 | ● | | ● | ● | ● | | | WF-20 | ● | **AF7915M** | ZT | | ZTL | | | ZT4 | | | T8 | | | |
| 5 MP | USB 2.0 | ● | | ● | | | ● | ● | WF-20 | ● | **AF7515M** | ZT | | ZTL | | | | T4A | | T8A | TFP | T1A ZT1P | T2A ZT2P |
| 5 MP | USB 2.0 | ● | | | | | | | WF-20 | ● | **AF7115M** | ZT | | ZTL | ZTW | TF | | | | | | | |
| 1.3 MP | USB 2.0 | ● | | ● | ● | | | | WF-20 | | **AF4915** | | ZT | ZTL | | | | | | | | | |
| 1.3 MP | USB 2.0 | ● | | ● | | | | | WF-20 | | **AF4515** | | ZT | ZTL | | | ZT4 | | T5 | T8 | | | |
| 1.3 MP | USB 2.0 | ● | | | | | | | WF-20 | | **AF4115** | | ZT | ZTL | ZTW | TF/ZTF | | | | | | | |
| 5 MP | USB 2.0 | ● | | ● | ● | | | | WF-10 | | **AM7915M** | ZT | | ZTL | | | | | | | | | |
| 5 MP | USB 2.0 | ● | | ● | | | ● | ● | WF-10 | | **AM7515M** | ZT | | ZTL | | | | T4A | | T8A | TFP | T1A ZT1P | T2A ZT2P |
| 5 MP | USB 2.0 | ● | | | | | | | WF-10 | | **AM7115M** | ZT | | ZTL | ZTW | TF | | | | | | | |
| 1.3 MP | USB 2.0 | | | ● | | | | | WF-10 | | **AM4515** | | T/ZT | TL/ZTL | | | ZT4 | | T5 | T8 | | | |
| 1.3 MP | USB 2.0 | | | | | | | | WF-10 | | **AM4115** | | T/ZT | TL/ZTL | TW/ZTW | TF/ZTF | | | | | | | |
| 960H | TV | | | | | | | | | | **AM5212** | | T/ZT | TL/ZTL | | | | | | | | | |
| 720p | D-Sub | | | | | | | | | | **AM5216** | | ZT | ZTL | | TF/ZTF | | | | | | | |
| HD 720p | HDMI | | | | | | | | | | **AM5218** | | ZT | ZTL | ZTW | ZTF | | | | | | | |
| | | | | | | | | | | | | 20x ~ 50x, 220x (WD=48.7 ~ 0 mm) | | 20x ~ 90x (WD=151 ~ 46.6 mm) | | | 430x ~ 470x (WD=3.15 mm) | | 500x (WD=0.1 mm) | | | | |
| **Dino-Lite Premier** | | | | | | | | | | | | | | | | | | | | | | | |
| 1.3 MP | USB 2.0 | | | | | | | | WF-10 | | **AM4113** | T/ZT | | TL/ZTL | | | ZT4 | | T5 | | | | |
| 0.3 MP | USB 2.0 | | | | | | | | WF-20 | | **AF3113** | T | | | | | | | | | | | |
| 0.3 MP | USB 2.0 | | | | | | | | WF-10 | | **AM3113** | T | | | | | | | | | | | |
| **Dino-Lite Basic** | | | | | | | | | | | | | | | | | | | | | | | |
| 0.3 MP | USB 2.0 | | | | | | | | WF-10 | | **AM2111** | ● | | | | | | | | | | | |

* The feature is limited to use in DinoCapture.

### Special Lighting Options

| | UV | | Infrared | | | Switchable | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 375 nm | 395 nm | 780 nm | 850 nm | 940 nm | 375 nm + white | 395 nm + white | 375 nm + 940 nm | 395 nm + 940 nm |
| **AM8117M** | FU | FV | FK | FI | FJ | FUW | FVW | JU | JV |
| **AM4117M** | FU | FV | FK | FI | FJ | FUW | FVW | JU | JV |
| **AF4515** | FU | FV | FK | FI | FJ | FUW | FVW | JU | JV |

### Fluorescence Options

| | ex. | 400 nm | 435 nm | 465 nm | 465 nm + 580 nm | 465 nm | 520 nm | 575 nm | 620 nm |
|---|---|---|---|---|---|---|---|---|---|
| | em. | 420 ~ 650 nm | 475 ~ 650 nm | 510 ~ 545 nm | 505 ~ 535 nm + 610 ~ 650 nm | 510 ~ 620 nm | 570 ~ 650 nm | 615 ~ 650 nm | 655 ~ 950 nm |
| **AM8117M** | | CFVW | BFCW | G2FBW | GRFBY | GFBW | YFGW | RFYW | DFRW |
| **AM4117M** | | CFVW | BFCW | G2FBW | GRFBY | GFBW | YFGW | RFYW | DFRW |

Product to be available.

## Dino-Eye Eyepiece Camera

| Product | Resolution | Interface | Eyepiece Port |
|---|---|---|---|
| **AM7025X** | 5 MP | USB 2.0 | 23 mm / 30 mm / 30.5 mm / C-Mount |
| **AM4025X** | 1.3 MP | USB 2.0 | 23 mm / 30 mm / 30.5 mm / C-Mount |

Product information may be subject to change.



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