

# DINO-LITE SPECIAL LIGHTING



# DINO-LITE SPECIAL LIGHTING

Many specialized applications in science, forensics, industry, engineering or in the medical field, require special lighting. For many specific applications Dino-Lite models were created with ultra-violet lighting, infrared lighting, fluorescent lighting or even combinations between the different lighting types.

Dino-Lite microscopes in this range offer an optical resolution of 1.3 megapixel or 5 megapixel, a USB connection and include the user-friendly DinoCapture software. Magnification ranges from medium to high (until ~500x) are available. Models with an extra robust metal housing are part of this range. The widely acclaimed series of Dino-Lite fluorescence microscopes are considered to be the world's smallest fluorescence microscopes. Compared to the traditional fluorescence microscopes with band-pass type of emission filters, the Dino-Lites high-pass emission filters provide visibility and sensitivity over a larger range of the fluorescence wavelengths.



## ULTRAVIOLET (UV)



Dino-Lite handheld microscopes with ultra-violet (UV) light or a combination between UV and white light.

## FLUORESCENCE



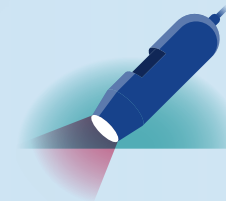
Dino-Lite handheld microscopes with fluorescent LEDs to detect fluorescence from 395nm to 610nm.

## STROBOSCOPIC LIGHT



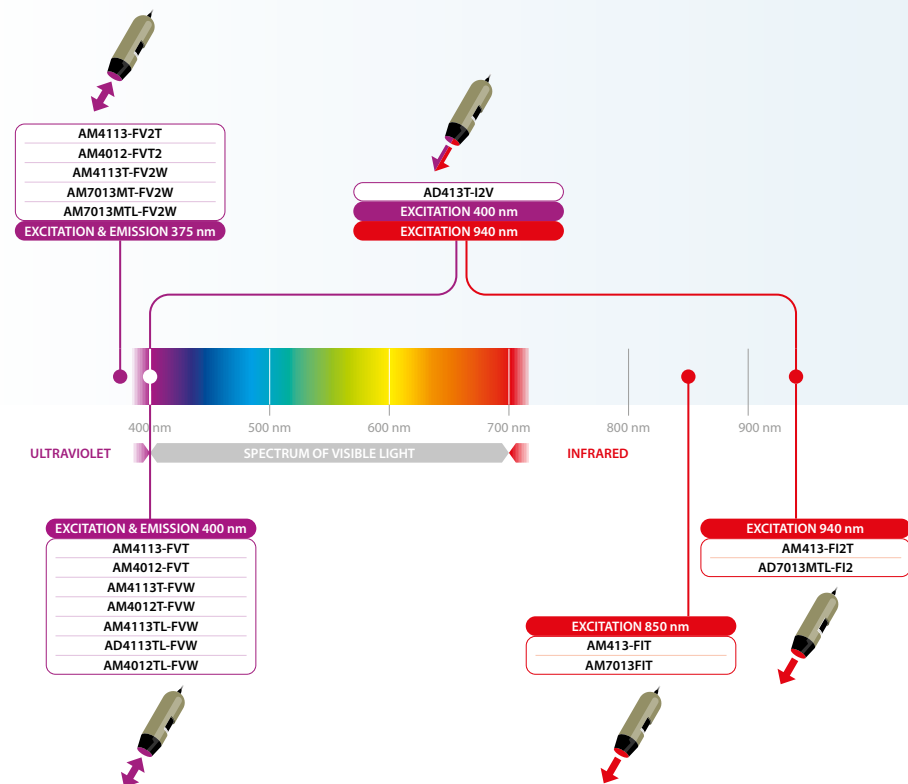
Dino-Lite handheld microscopes with stroboscopic technology to capture fast moving objects.

## INFRARED (IR)

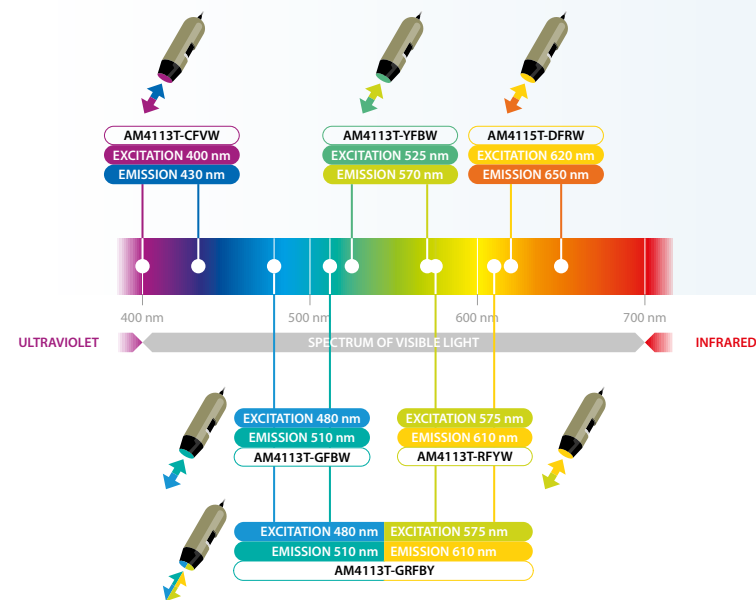


Dino-Lite handheld microscopes with infrared light or combinations between infrared and ultraviolet light.

## UV and IR models:



## Fluorescence models:

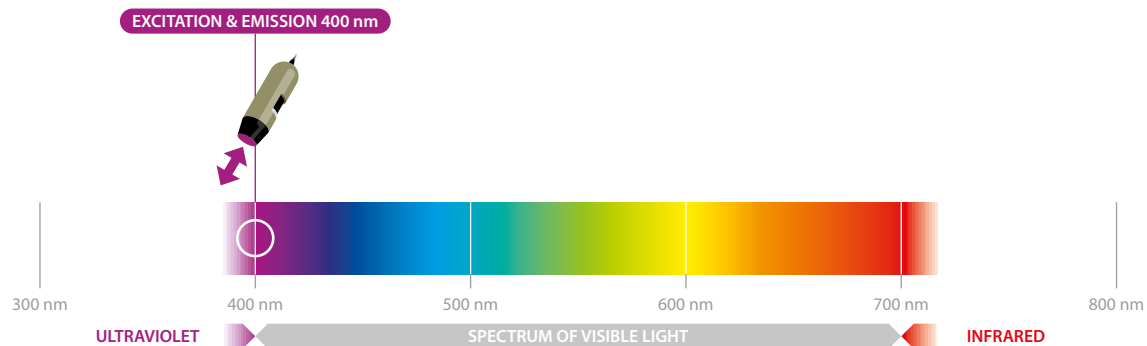


# HIGHLIGHTED PRODUCT More information on [www.dino-lite.eu/am4113t-fvw](http://www.dino-lite.eu/am4113t-fvw)

## AM4113T-FVW ULTRAVIOLET

The VW series has two types of LED lights that are switchable between white and UV light. The ultraviolet LED's have an excitation of 390-400 nm. This model has a filter to filter out the returning UV light so that an image with natural colors can be obtained.

Also available in a version with ~375nm LEDs (model AM4113T-FV2W).



MAGNIFICATION RATE	WORKING DISTANCE	FIELD OF VIEW (X)	FIELD OF VIEW (Y)	DEPTH OF FIELD
20	48.7	19.8	14.9	3.6
30	21.7	13.2	9.9	1.9
40	9.0	9.9	7.4	-
50	1.9	7.9	5.9	0.88
60	-2.3	6.6	5.0	-
220	-0.1	1.8	1.4	0.20
230	1.0	1.7	1.3	-
240	2.1	1.7	1.2	-

# DINO-LITE SPECIAL LIGHTING ULTRAVIOLET (UV)

More information on [www.dino-lite.eu/ultraviolet](http://www.dino-lite.eu/ultraviolet)

Dino-Lite handheld microscopes with ultraviolet (UV) light or a combination between UV and white light.



MODEL	RESOLUTION	MAGNIFICATION	CONNECTIVITY	LONG WORKING DISTANCE	MEASUREMENT & CALIBRATION	TYPE OF LEDS	NUMBER OF LEDS	EXCHANGABLE CAPS	POLARIZER	IR FILTER	OTHER FILTERS	METAL HOUSING	ESD-SAFE	ADDITIONAL FEATURES	PRICE RANGE	ALSO AVAILABLE
SPECIAL LIGHTING ULTRAVIOLET																
AM4113T-FVW	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	390/400nm UV + white	4+4	-	-	IR cut-filter >650 nm	UV cut filter	-	-	-	€200,00 - €350,00	AM4113T-VW* and AD4113T-FVW**
AM4113T-FV2W	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	375nm UV + white	4+4	-	-	IR cut-filter >650 nm	UV cut filter	-	-	-	€200,00 - €350,00	
AM4013MT-FVW	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	390/400nm UV + white	4+4	-	-	IR cut-filter >650 nm	UV cut filter	✓	✓	-	€350,00 - €550,00	AM4013MT-VW (without UV cut filter)
AM4113TL-FVW	1,3 Megapixel	10-90x	USB 2.0	✓	✓	390/400nm UV + white	4+4	-	-	IR cut-filter >650 nm	UV cut filter	-	-	-	€350,00 - €550,00	AM4113TL-VW (without UV cut filter)
AM4013MTL-FVW	1,3 Megapixel	10-90x	USB 2.0	✓	✓	390/400nm UV + white	4+4	-	-	IR cut-filter >650 nm	UV cut filter	✓	✓	-	€350,00 - €550,00	AM4013MTL-VW (without UV cut filter)
AM4113FVT	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	390/400nm UV	8	-	-	IR cut-filter >650 nm	Emission barrier filter 400 nm	-	-	-	€200,00 - €350,00	
AM4113FV2T	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	375 nm UV	4	-	-	IR cut-filter >650 nm	Emission barrier filter 375 nm	-	-	-	€200,00 - €350,00	
AM7013MT-FV2W	5 Megapixel	10-70x, 200x	USB 2.0	-	✓	375nm UV + white	4+4	-	-	IR cut-filter >650 nm	UV cut filter	✓	✓	-	€550,00 and above	

\* (without UV cut filter)

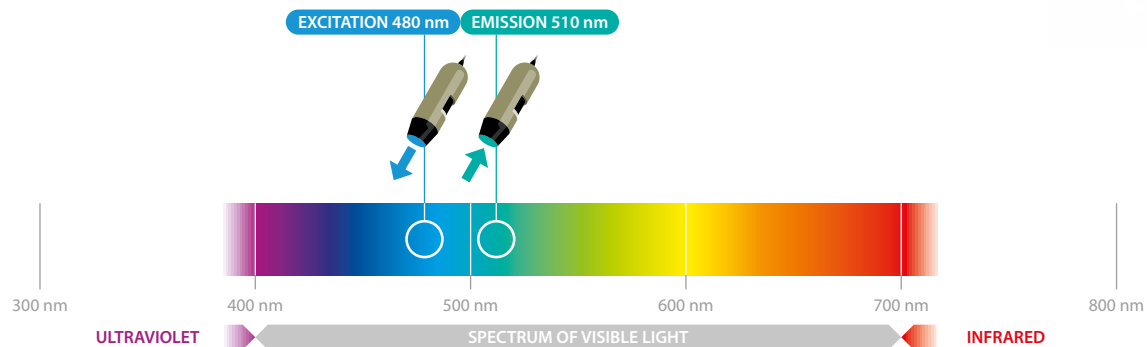
\*\* (with exchangeable caps)

# HIGHLIGHTED PRODUCT

More information on [www.dino-lite.eu/am4113t-gfbw](http://www.dino-lite.eu/am4113t-gfbw)

## AM4113T-GFBW, FLUORESCENCE

The Dino-Lite AM4113T-GFBW digital microscope is optimized for research and viewing fluorescent objects by using blue LEDs. It has a 510 nm emission filter that is designed to observe green fluorescence including but not limited to GFP (green fluorescent protein). Compared to the traditional fluorescence microscope's band-pass type of emission filters, the Dino-Lite's high-pass type emission filter provides visibility and sensitivity over a larger range of the fluorescence wavelength. Green fluorescent objects pop out under the microscope and you can clearly see its green glow. The AM4113T-GFBW has the capability of switching the light source from the blue to white LEDs which is convenient for locating the object and obtaining an easy focus.



# DINO-LITE SPECIAL LIGHTING FLUORESCENCE

More information on [www.dino-lite.eu/fluorescence](http://www.dino-lite.eu/fluorescence)

Dino-Lite handheld microscopes with fluorescent LEDs to visualize fluorescence from 395nm to 610nm



MODEL	RESOLUTION	MAGNIFICATION	CONNECTIVITY	LONG WORKING DISTANCE	MEASUREMENT & CALIBRATION TYPE OF LEDS	NUMBER OF LEDS	EXCHANGABLE CAPS	POLARIZER	IR FILTER	OTHER FILTERS	METAL HOUSING	ESD-SAFE	ADDITIONAL FEATURES	PRICE RANGE	ALSO AVAILABLE
SPECIAL LIGHTING FLUORESCENCE															
AM4113T-CFVW	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	400 nm UW + white	7+1	-	-	no	Emission passthrough filter 430 nm	-	-	-	€ 350 - € 550
AM4113T-YFGW	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	525 nm green + white	7+1	-	-	no	Emission passthrough filter 570 nm	-	-	-	€350,00 - €550,00
AM4113T-RFYW	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	575 nm yellow + white	7+1	-	-	no	Emission passthrough filter 610 nm	-	-	-	€350,00 - €550,00
AM4113T-GFBW	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	480 nm blue + white	7+1	-	-	no	Emission passthrough filter 510 nm	-	-	-	€350,00 - €550,00

AM4113T4-GFBW\*  
\* with 400-470x magnification



## Cell research made visible with usb fluorescence microscopy

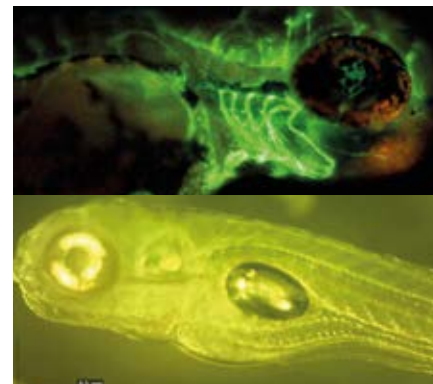
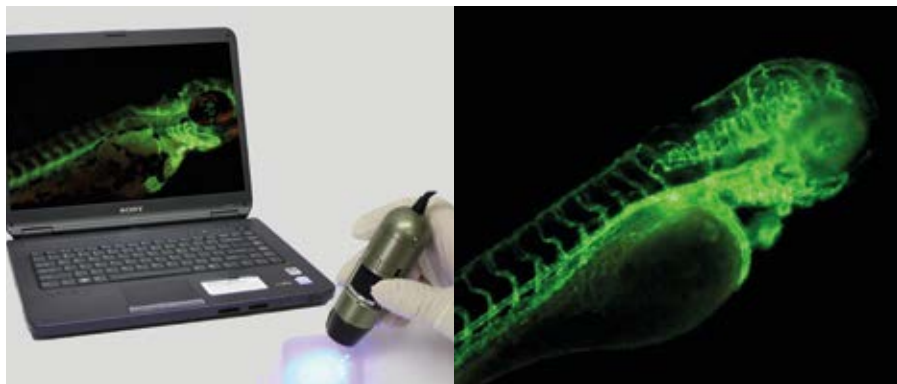
### Dino-Lite helps researchers to form an image

Research into life-threatening diseases is of great importance. Miraculously a small striped fish with special light microscopy can play an important role. Professor Yung-Jen Chuang (47) from Taiwan is doing research with zebrafish using Dino-Lite fluorescence microscopes.

Within the National Tsing Hua University in Hsinchu, Taiwan, Professor Yung-Jen Chuang runs a laboratory for vascular biology. Vascular biology is the study of our circulatory system in all its forms, from the aorta to the smallest capillary in the brains. Professor Yung-Jen Chuang and his team are particularly interested in the molecular and cellular processes that occur when new blood vessels are formed from the existing blood vessels, a process that is called angiogenesis. The team is also investigating how tissue repair occurs after injury to vital organs such as heart or brains, and examines which reactions influence the blood circulation within a tumor.

The studies also involve functional genomics that aims to identify what specific genes work harder, for instance to speed up regeneration. Obviously Professor Yung-Jen Chuang is leading a team that consists of a large number of researchers, an even greater number of zebrafish and Dino-Lite fluorescence microscopes.

Professor Yung-Jen Chuang worked with Dino-Lite to develop the fluorescence digital microscopes: "I am delighted that the Dino-Lite fluorescence microscopes are of good quality and affordable. Moreover, they are easy to use. Thus, we can enable more researchers to work after minimal training, and also enlist various sets of Dino-Lites that we have for educational purposes. It is easy to show the images on a laptop, and we can store both video and still images to study changes in tissue better." Read the full case study on [www.dino-lite.eu/zebrafish-research](http://www.dino-lite.eu/zebrafish-research)





DINO-LITE SPECIAL LIGHTING STROBOSCOPIC

More information on: [www.dino-lite.eu/stroboscopic](http://www.dino-lite.eu/stroboscopic)

Dino-Lite handheld microscopes with stroboscopic technology to capture fast moving objects.

Dino-Lite handheld microscopes with stroboscopic technology make it possible to capture fast moving objects. The Dino-Lite with stroboscopic light feature takes perfect pictures by reducing motion blur, even under higher magnification. The strobomicroscope technology enables you to capture fast moving objects in a very easy and convenient way. It can be used for monitoring production lines in a manufacturing environment, observing living creatures in a laboratory environment or any other application with fast-moving objects.



MODEL	RESOLUTION	MAGNIFICATION	CONNECTIVITY	LONG WORKING DISTANCE	MEASUREMENT & CALIBRATION	TYPE OF LEDS	NUMBER OF LEDS	EXCHANGABLE CAPS	POLARIZER	IR FILTER	OTHER FILTERS	METAL HOUSING	ESD-SAFE	ADDITIONAL FEATURES	PRICE RANGE
SPECIAL LIGHTING STROBOSCOPIC															
AM3713TB	VGA (640x480)	10-70x, 200x	USB 2.0	-	✓	white (stroboscopic)	8	-	-	IR cut-filter >650 nm	-	-	-	-	€200,00 - €350,00
AM3715TB	VGA (640x480)	20-220x	USB 2.0	-	✓	white (stroboscopic)	8	-	-	IR cut-filter >650 nm	-	-	-	-	€350,00 - €550,00

# DINO-LITE SPECIAL LIGHTING INFRARED (IR) More information on [www.dino-lite.eu/infrared](http://www.dino-lite.eu/infrared)

Dino-Lite handheld microscopes with infrared light or combinations between infrared and ultraviolet light.



MODEL	RESOLUTION	MAGNIFICATION	CONNECTIVITY	LONG WORKING DISTANCE	MEASUREMENT & CALIBRATION TYPE OF LEDS		NUMBER OF LEDS	EXCHANGABLE CAPS	POLARIZER	IR FILTER	OTHER FILTERS	METAL HOUSING	ESD-SAFE	ADDITIONAL FEATURES	PRICE RANGE	ALSO AVAILABLE
SPECIAL LIGHTING INFRARED																
AM413FIT	1,3 Megapixel	10-70x, 200x	USB 2.0	-	✓	850 nm IR	8	-	-	IR pass filter	Emission passthrough filter 850 nm	-	-	-	€200,00 - €350,00	AM413FI2T (with ~940 nm LED)
AD4113T-I2V	1,3 Megapixel	20-200x	USB 2.0	-	✓	390/400 nm UV + 940 nm IR	4+4	✓	-	no	-	-	-	-	€350,00 - €550,00	
AM7013M-FIT	5 Megapixel	10-70x, 200x	USB 2.0	-	✓	850 nm IR	8	-	-	IR pass filter	Emission passthrough filter 850 nm	✓	✓	-	€550,00 and above	
AD7013MTL-FI2	5 Megapixel	20-90x	USB 2.0	✓	✓	940 nm IR	8	✓	-	IR pass filter	Emission passthrough filter 850 nm	✓	✓	-	€550,00 and above	

# DINO-LITE SOFTWARE



# DINO-LITE SOFTWARE

A professional, reliable software environment is essential when working with computer equipment like an USB microscope. All Dino-Lite USB products are delivered with an in-house developed software program.

The Dino-Lite software is continuously developed, is free of charge for Dino-Lite users and has an automatic update feature. Dino-Lite software is available for Windows and for MacOS (DinoXcope). DinoCapture software is intuitive, user-friendly and can be used with hardly any training. Free online & e-mail software support is available.

The DinoCapture 2.0 software is available in many languages, such as: English, German, French, Spanish, Chinese, Japanese, Korean, Portuguese, Italian, Russian, Dutch, Greek, Hungarian, Polish, Romanian, Swedish, Finnish, Danish, Czech, Croatian, Norwegian, Turkish, Arabic.

Main software features:

- ▶ Capturing photographs, videos or time-lapsed videos
- ▶ Saving pictures in several formats
- ▶ Advanced image processing
- ▶ Measurement options like: line, radius, circle, 3-point circle, angle, etc.
- ▶ Measurements on captured images or on live images
- ▶ Calibration
- ▶ E-mail integration
- ▶ Adding notes and markings on images
- ▶ Skype integration for real-time on-line sharing with suppliers, customers or colleagues
- ▶ Connect multiple Dino-Lite microscopes
- ▶ Controlling lighting options from the software
- ▶ IP functionality for remote viewing of microscopic images
- ▶ Barcode/QR code recognition functionality
- ▶ GPS integration



Advanced measurement options like:  
line, radius, circle, 3-point circle, angle, etc.

Calibration functionality

Settings menu

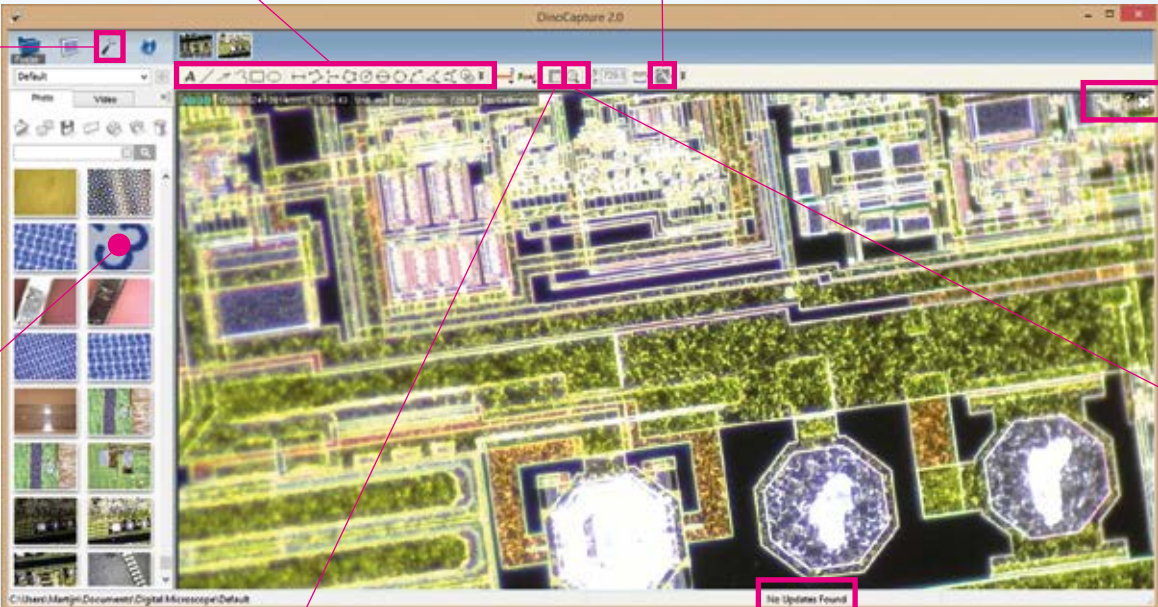
Capturing photographs, videos or time-lapsed videos

Camera adjustment settings such as white balance, auto exposure, etc.

Auto-update functionality (free of charge updates)

Magnifier for more precise measurements

Detailed Excel report including measurement data



The main interface shows a 3D model of a building with various measurement tools. A red box highlights the 'Measure' button in the top toolbar. Another red box highlights the 'Calibration' button in the top toolbar. A third red box highlights the 'Camera Adjustment' button in the top toolbar. A fourth red box highlights the 'No Updates Found' message in the bottom right corner. A fifth red box highlights the 'Settings' button in the top toolbar. A sixth red box highlights the 'Magnifier' button in the bottom right corner. A seventh red box highlights the 'Excel Report' button in the bottom left corner.

Settings menu

Capturing photographs, videos or time-lapsed videos

Camera adjustment settings such as white balance, auto exposure, etc.

Auto-update functionality (free of charge updates)

Magnifier for more precise measurements

Detailed Excel report including measurement data

Name	Length(um)	x1	y1	x2	y2
D1.0	3,508	646	291	646	284
D1.1	63,25	266	236	409	217
D1.2	8,943	935	271	931	251

Area

Name	Length(um)	Area(um²)	x1	y1	x2	y2
P1.0	214,006	1,2594	769	454	734	503

Angle

Name	Angle(deg)
T1.0	134,977

**Dino-Lite**  
**Digital Microscope**  
**The Industry Standard**

[www.dino-lite.eu](http://www.dino-lite.eu)

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