

INTRODUCING T50

Best live image with 4K/60FPS

TAGARNO is proud to present T50, the first digital microscope using Sony ISS' new 4K block camera.



Why **4K/60FPS** is important for your inspections

T50 displays a **truly live**, near zero latency image with 4K/60 frames per second (FPS), providing a comfortable user experience by removing disorienting effects that can be felt when using lower frame rate cameras.

The T50 provides a natural, through-the-eyepieces feel, normally associated with traditional eyepiece based microscope systems but with all of the benefits that come with a full TAGARNO digital microscope, including software capabilities.

Providing **superior image quality** and **user experience**

T50 can detect if your sample is no longer in focus and will **automatically readjust** itself to the right working height.

This combined with the built-in **vibration reduction features** not only creates a user experience never before seen within digital microscopy. The T50 also actively ensures that your samples are always in focus, no matter where or how you're using it, to give you the best possible images.

TECHNICAL SPECIFICATIONS

T50



CAMERA / INTERFACES

Resolution	4K (3840x2140), 8 MP
Frame rate	60FPS (Live image and recorded video)
Zoom	25X optical zoom
Aspect ratio	16:9
Video output	HDMI
PC interface	USB 3.0

LENS / MAGNIFICATION

Lens compatibility	+3, +4, +5, +10, +25 and +50
Magnification level	1.3x – 660x
Field of view	0.80 mm – 409 mm / 0.03" – 16.10"

DIMENSIONS / WEIGHT

Working height	34 mm – 335 mm / 1.34" – 13.19"
Height adjustment	Motorized (Manual/Automatic)
Working depth	370 mm / 14.57"
Dimensions (HxWxD)	390 – 635 mm x 320 mm 565 mm / 15.35" – 25.0" x 12.60" x 22.24"

Scan for
more info



TAGARNO

Or visit info.tagarno.com/T50

Introducing

T50, a new digital microscope with **4K and 60 frames per second** live images

Launching 2024, the TAGARNO T50 offers:

- The best live image in the world with 4K and 60 frames per second images
- Automatic height adjustment with auto focus
- Low and high power magnification (up to 660x) on one single system
- Magnetic lens and ring light attachment
- Large working space
- User profiles and menu customization
- Software and AI capabilities



See short video on T50

Why **4K/60 FPS** is important for your inspections

4K has become the standard when it comes to image resolution. It ensures high quality still images, allowing you to see every little detail of your sample.

But many 4K digital microscopes only operate with 30 frames per second.

From a user perspective, this is very uncomfortable to be working with because there's a delay between what's happening underneath the microscope and on the monitor. Some even experience feeling sea sick from working with low frame rates.

With **60 frames per second**, however, there's no delay and you won't feel sea sick. Everything that happens underneath the microscope is displayed in real-time on the monitor using **auto focus**.

New T50 microscope wins 2024 NPI Award

TAGARNO is pleased to announce that it has received a 2024 CIRCUITS ASSEMBLY NPI (New Product Introduction) Awards for its groundbreaking T50 Microscope with 4K/60FPS.

This prestigious award highlights TAGARNO's commitment to innovation in the field of microscopy, setting a new standard for real-time visualization and user experience.



Other **benefits** of the new T50

Magnetic ring light and no extra control box

Not only is the ring light for T50 is magnetic, effectively eliminating the need for cables or mounting additional lighting with screws. The ring light is also controlled with the same control box as the microscope to reduce the number of control boxes needed on your workspace.

Find the right height automatically

You control the height of the microscope using the new control box. That's right. It all happens automatically. And if you've changed lenses or changed to a new sample that requires a different working height, the microscope will let you know that your image is no longer in focus before automatically readjusting to the right height.

Taking photos is still incredibly easy

All it takes to take a photo of your sample is pressing the Camera button on the control box. But you can also take your inspections to new heights by using the Open API to control the microscope and when it should take photos.

No tools needed for assembly

On T50, our main focus was to make the user experience as exceptional as possible. That also includes how to assemble the microscope. When buying the T50, the arm comes pre-assembled and you simply attach it to the base using a latch. No tools needed.



Full tech specs of the T50

Lens/magnification

Lens compatibility:

+3, +4, +5, +10, +25, +50

Magnification level:

1.3x - 660x

Field of view [mm]:

0.8 - 409.0

Dimensions/Weight

Working height [mm]

34 - 335

Height adjustment:

Motorized (Manual/Automatic)

Working depth [mm]:

370

Dimensions (HxWxD) [mm]:

Min: 390 x 320 x 565

Max: 635 x 320 x 565

Camera/Interfaces

Resolution:

4K (3840x2160), 8MP

Frame rate:

60 FPS (Live image and recorded video)

Zoom:

25x optical zoom

Aspect ration:

16:9

Video output:

HDMI

PC interface:

USB 3.0

Standard Microscope Features

- Zoom in/out
- Auto focus
- Manual focus
- Spot focus
- Hands-free control
- Define lens
- Define start magnification
- Choose video format
- Optimal working distance assistance
- Picture flip
- Mirror image
- Scale bar

Image Capturing

- Capture images or videos
- Access images captured via control box without computer
- Access images captured via control box on a computer
- Choose format of captured images
- Create prefix for file names
- Assign name to captured images
- See image preview
- Capture images in defined intervals
- Include EXIF data
- Share microscope live feed in online meetings (No drivers needed)
- Focus stacking

Light Features

- Integrated light (dimnable)
- Basic camera settings
- Advanced camera settings
- Additional Ringlight (fully adjustable)
- Glare removal

Customization Features

- Individual login/settings (Take your settings to every T50)
- Select monitor width manually
- Monitor width detection
- Choose system units
- Choose numeric format
- Choose system language
- Choose keyboard layout
- Change time and data

Control features

- Control box (full control)
- Mouse (full control)
- Keyboard (full control)
- Open API



Azienda Certificata
ISO 9001:2015

Corso Milano, 14
20837 Veduggio Con Colzano (MB)
Tel. +39 0362 910763
Fax. +39 0362 911255
www.dgts.it - email: info@dgts.it
Pec: dgts@legalmail.it

Codice Fiscale e Partita Iva IT 10785460154 - Registro delle imprese 10785460154 - REA MB 1407783 - Cap.Soc. € 90.000,00 I.V.