

# 4K Digital Microscope U30s



Configurable, Ergonomic Optical Inspection System

4K Digital Microscope powered by INSPECTIS®

- Premium imaging quality available in two industrial grade form factors, U30 and U30s
- Ultra HD 8.3 megapixel 30fps camera for careful inspection of fine detail
- Superior 30:1 zoom lens with fast auto-focus and iris control
- Pre-calibrated optics with zoom tracking and direct camera control in INSPECTIS® software
- Designed for outstanding optical performance at entire field of view
- Options include 500mm, and 1000mm working distance, 3m extended cable, ESD-protected housing, hermetic sealed housing, and a built-in laser pointer options

 **INSPECTIS**

Quality of Inspection

# Designed for Ergonomic Use

Inspectis Ultra HD digital microscopes provide relief to eyes, neck and shoulders through the unique ergonomic design and 228 mm free working distance. By allowing operators to sit comfortably in a good working position, their inspection tasks can be carried out more efficiently.



U30, All-in-alone 4K system with advanced remote control

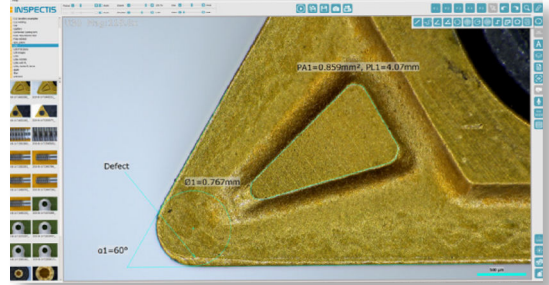
Thanks to its sensitive image sensor and superior optics, U30/U30s provide astonishing sharp images of the objects with minimum glare and colour fringes at entire field of view.



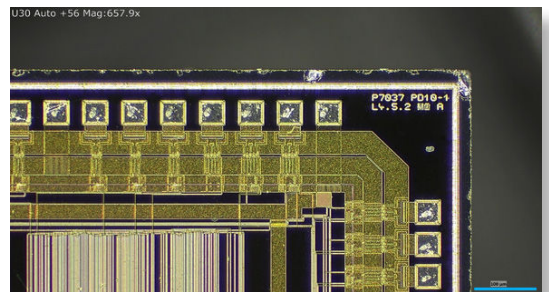
The system's standard optics produces ~ 2 - 60x magnification (28" monitor). If further magnification is needed, a wide range of diopter Macro Lenses can be added to magnify up to 178x.

Inspectis digital microscopes offer true ease of use with minimal interaction needed with controls and settings. All basic parameters such as zoom, brightness and colour levels can be controlled by the user through on-board buttons on top of the device.

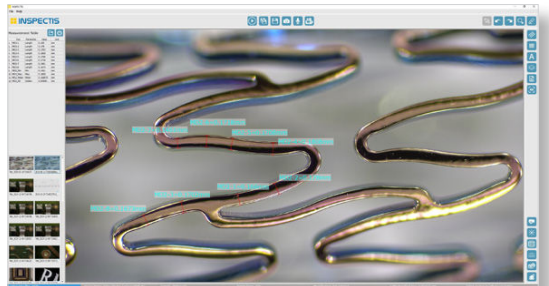
An optional built-in laser pointer aims at the area of interest and assists in locating it on the screen.



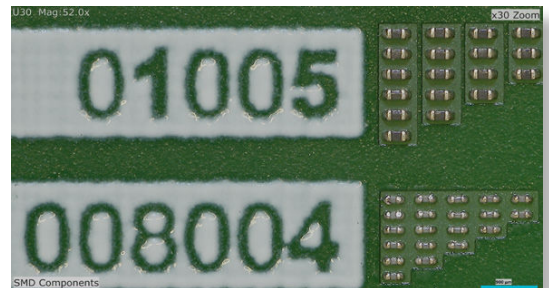
Cutting tool viewed in INSPECTIS, 118x magnification



Micro electronics, 658x magnification



Stent viewed in INSPECTIS, x20 Zoom, +28 Macro



SMD components, x28 Zoom, 52x magnification

*"Ultra Resolution, Ergonomic, Endlessly Versatile!"*

# Making Optical Inspection Enjoyable

Connect a U30 digital microscope to a 4K UHD display or your PC via Inspectis' plug-&-play USB3.0 or PCIe converter and take advantage of the astonishing image resolution, high contrast, true colours at 1:30x zoom range in your optical inspection work.

The Inspectis U30 and U30s digital microscopes can significantly reduce the time you spend on inspecting parts compared with other optical visual systems.



- 1:30 Zoom Optics
- AutoFocus
- On board Controls
- Aluminium Housing
- HDMI Digital Output
- Red Laser Pointer
- Modular Design
- ESD Protected
- Stable Stands
- USB3/PCIe Captures
- Wide range of accessories
- Advanced Remote Controllers



The Inspectis 4K Digital Microscopes are available in two basic models:

U30, an all-in-one, plug-and-play system with integrated aluminium stand and built-in adjustable white LED illumination.

U30s, a stand-alone, totally configurable system with a variety of mounting solutions. Select between any of Inspectis' Boom type, XY-type or Articulated arm stands.



U30 All-in-One



U30s with Track Stand and XY board

*"Designed according to Industry Standards"*

# System Specifications

## System:

Video Output	Ultra HD 2160p/30, switchable to Full HD 1080p/60
Imager	8.5 Mpixels. 3840(H) x 2160(V) 16:9 format. Progressive scan CMOS image sensor
Pixel Size (resolution)	1.62 µm x 1.62 µm
I/O Ports	HDMI video output, 5P MiniDin Power input, 8P MiniDin External Remote Control
On-board Control	Zoom, Iris, Auto Focus on/off, White Balance, 4K to Full HD format swap.
External Remote Control	Zoom, Iris, Manual/Auto Brightness, Manual/Auto Focus, White Balance, Picture Quality Mode, Display Text, Haircross overlay, Image Rotate, Image Freeze, Memory Save/Recall (2 pcs), Foot-switch, Video Output Format and Frame Rate.
Illumination	Integrated Long-life 18x ultra bright pure white LEDs with direction adjustment (U30 model). Optional Ringlight (U30s model)
Storage Environment	-20° - +60°C, 20 - 95% RH, non-condensing
Operating Environment	-5° - +40°C, 20 - 95% RH, non-condensing
Size, Weight U30	395 x 240 x 360 mm including metal base, 4.5 kg. including metal base
Size, Weight U30s	φ 86.5 x 137mm exclusive cable. 0.78 kg. excluding cable and stand

## Optics:

Optical system	30x Zoom with Auto Focus and Iris Control
Working distance	228 mm (from lens to object at maximum zoom factor)
Magnification x1-x30 zoom factor	~ 2.0x ~ 60x on 28" monitor (~ 192x with +10 macro lens)
Field of View at x1-x30 zoom factor	~ 297 x 167 mm to ~ 9.9 x 5.6 mm (~ 3.2 x 1.8mm with +10 lens)
Laser pointer	Red LED with automatic through-optics alignment

## Ordering numbers Inspection Systems:

Item name	Order No.
Inspectis U30, 4K All-in-One Digital Microscope	HD-015
Inspectis U30s, 4K Modular Digital Microscope	HD-016
Upgrade with 3m Extended Cable	* -EC
Upgrade with Antistatic housing	* -E
Upgrade with Laser Pointer	* -L
Upgrade with Advanced Iris Controlled A-Brightness	* -A

White RingLight with Diffuser and Segment Control	HD-124
Dual White & UV RingLight with Segment Control	HD-124-WUV
Polarization filter set for Ring Light, 67mm	HD-024-P-U
Ring Light UV 365-375nm wavelength LED	HD-025
4K HD USB3.0 Capture with software Basics	HD-043
4K HD USB3.0 Capture with software Pro	HD-044
4K HD USB3.0 Capture with software ProX	HD-044-PX
XY Floating Board, Antistatic	HD-028
XY Floating Board with position lock, Antistatic	HD-028-L
Tilt Board, Antistatic	HD-029
Single-arm Boom stand	HD-060
Double-arm Boom Stand	HD-070
Articulated-arm Boom Stand	HD-080
Rack-&Pinion Fine Focusing module	HD-090
Track stand, Large Base with focusing WD 35-410mm	HD-210-LB-E
XY-travel Stand, In-line / Table-top	HD-170/180
Aluminium carrying case	HD-040

## Ordering numbers O

Remote Camera Control, Advanced Adjustments	HD-020
Foot switch for Remote Camera Control	HD-027
Macro lens +3 diopter, 67mm (Achromatic)	HD-038
Macro lens +5 diopter, 67mm (Achromatic)	HD-039
Inspectis High Magnification lens +28 diopter	HD-142
Inspectis High Magnification lens +56 diopter	HD-143
360 degrees Rotating Viewer	HD-041



Reseller



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# INSPECTIS

Quality of Inspection

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