



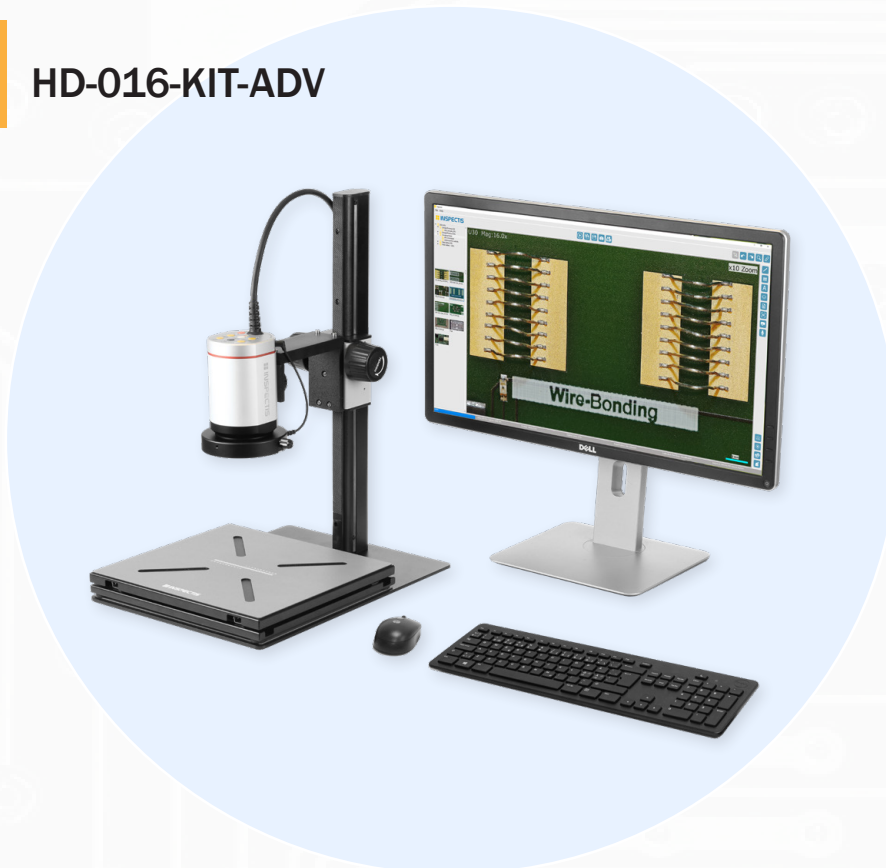
# Ergonomic, Modular, Optical Inspection

# System Package: Advanced

Robust and high-resolution 4K digital inspection system for advanced Optical Inspection, Quality Control, R&D, Measurements, Analysis, Reporting and Documentation of any object especially PCB's and electronics components.



HD-016-KIT-ADV



Monitor and keyboard are illustrative and ordered separately

## System configuration 4K

- Inspectis U30s, Ultra HD 2160p Digital Microscope
- +10 diopter extra lens
- Robust Track Stand with large antistatic base
- Antistatic XY-Floating Board with magnetic pegs
- White LED Ring-light with diffuse and transparent filters
- INSPECTIS© Pro software with 4K USB Capture device

## Available as Full HD

HD-013-KIT-ADV and  
HD-113-KIT-ADV



## Highlights

Ultra High Definition (4K) 8.3 megapixel images with 2x to 720x magnification range for careful inspection of fine details

Robust stand with precise rack & pinion and 365mm Working Distance make image focusing and WD adjustment easy.

Large working area XY floating board (450x510mm) for lateral displacement of inspection object.

Built-in camera and lens controls and pre-calibrated optics with INSPECTIS© software including 5 quick access memory pre-sets.

Robust and durable design according to industry standards for long life, hassle-free operation.

Options include ESD-protected housing and a built-in laser pointer

# System Package: LWD

Premium imaging quality featuring Long Working Distance and large field of view.  
Available in two industrial grade models with 550mm or 1200mm working distances.  
Ergonomic design with unobstructed view to the monitor.

**4K**  
ULTRA HD

## HD-016-KIT-LWD



## HD-013-KIT-LWD HD-113-KIT-LWD

**1080p**  
FULL HD



Monitor is illustrative and ordered separately

### System configuration 4K

- Inspectis U30s LWD, Ultra HD 2160p Digital Microscope  
350-550mm Working Distance
- Single-arm Boom Stand, LWD, ESD-Protected
- Remote Camera Control with Advanced Adjustments
- RingLight White LED with detachable diffuser

### System configuration FHD

- Inspectis F30s (F35s) LWD, FHD 1080p Digital Microscope  
350-550mm Working Distance
- Single-arm Boom Stand, LWD, ESD-Protected
- Remote Camera Control with Advanced Adjustments
- VESA Monitor Holder for LWD Boom Stand

## Highlights

Ultra High Definition (4K) 8.3 megapixel images for inspection of fine details.

700mm or 1600mm field of view with outstanding optical performance for inspection of large objects.

Advanced external remote control with memory presets and foot switch output for hand-free control of camera or lens.

VESA monitor holder attached to the stand post provides an ergonomic position for operator with unobstructed view to the monitor.

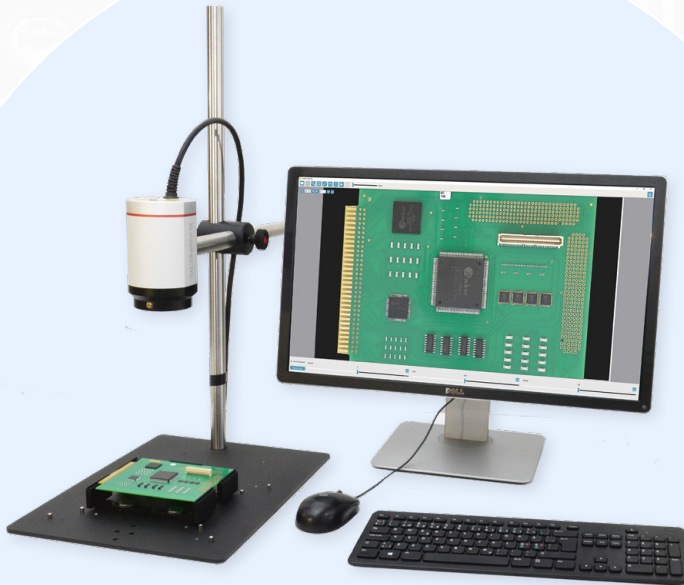
Options include ESD-protected housing and a built-in laser pointer

# System Package: OAI

Premium 4K system, pre-configured for **Overlay Assisted Inspection** with INSPECTIS© OAI software  
An innovative semi-automatic inspection tool for identifying missing components, wrong polarities, misplacement and other defects on assembled PCBs, In-line as well as Off-line.

**4K**  
ULTRA HD

**HD-016-KIT-OAI**



Monitor and keyboard are illustrative and ordered separately

## System configuration 4K

- Inspectis U30s LWD, 4K 2160p Digital Macroscope
- Single-arm Boom Stand, LWD, Large Base with PCB Holder
- INSPECTIS© OAI, Overlay Edit and Display Software with Built-in Camera and Lens Controls
- Inspectis 4K UHD USB3.0 Capture Pro Device

## Available as Full HD

HD-113-KIT-OAI

**1080p**  
FULL HD

## Highlights

Ultra High Definition (4K) 8.3 megapixel optical performance enables inspection of fine details on large field of view.  
550mm working distance and 670mm Field of View allows inspection of large size PCB:s.

Extensive comparison and overlay tools with timer-controlled interval display enables easy detection of different defects.

Configurable as post-production off-line or in-line inspection system together with Inspectis XY-travel rail stand.

# System Package: Soft

For optical inspection, image/video capture and documentation directly in the computer.  
Full HD performance with high frame rate video streaming via USB3.0 interface.  
Upgrade with INSPECTIS© Pro for measurements, image comparison, overlay and reporting.

**1080p**  
**FULL HD**

**HD-013-KIT-SOFT**  
HD-113-KIT-SOFT



Monitor and keyboard are illustrative and ordered separately

## System configuration Full HD

- Inspectis F30s (F35s) Full HD 1080p Digital Microscope
- Single-arm Boom Stand
- Single-Spot LED matrix light with gooseneck
- INSPECTIS© Basics software with USB3.0 Capture device

**Available as 4K**  
HD-016-KIT-SOFT

**4K**  
**ULTRA HD**

## Highlights

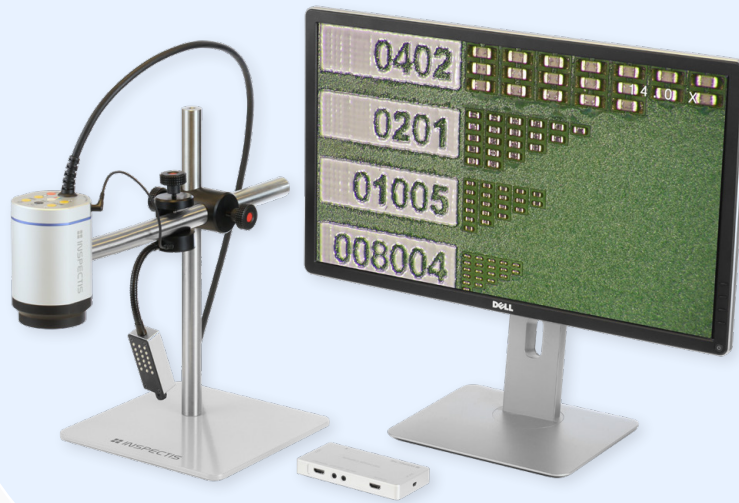
Cost effective Full HD 60 fps resolution with 30:1 zoom optics, auto-focus and plug & play USB3.0 interface.  
Powered by INSPECTIS© software with pre-calibrated configurations, automatic zoom tracking and direct camera control.  
Single-spot LED matrix light with gooseneck arm providing reflection free pure white oblique illumination.  
Excellent cable management allows keeping working bench clean and free.

# System Package: Capture

For optical inspection, quality control and image/video capture without computer.  
Full HD performance with high frame rate and true colors.  
Still image and digital video capture on USB flash memory.

**1080p**  
**FULL HD**

**HD-013-KIT-CAP**  
HD-113-KIT-CAP



## System configuration

- Inspectis F30s (F35s) Full HD 1080p Digital Microscope
- Single-arm Boom Stand
- Single-Spot LED matrix light with gooseneck
- Full HD External Image Capture and Video Recorder
- Full HD LCD monitor, 23"-24"

**Available as 4K**  
HD-016-KIT-CAP

**4K**  
**ULTRA HD**

## Highlights

Cost effective Full HD 60 fps resolution with 30:1 zoom optics, auto-focus and true colours make optical inspection enjoyable.  
1.9x to 56x on-screen magnification and 270mm to 9.3mm field of view range fits to most PCB inspection requirements.  
Single-spot LED matrix light with gooseneck arm providing reflection free oblique illumination.  
Excellent cable management allows keeping working bench clean and free.

# System Packages: All-in-One

Plug & play, reliable and cost effective digital inspection system with motorised zoom, auto focus, integrated illumination, and on-board controls.

4K or Full HD image performance with high frame rate video can be directly connected to a monitor via HDMI or to computer via high speed USB3.0 or PCIe interface.



**HD-015**  
HD-017



## System configuration 4K

- Inspectis U30 (U10) Ultra HD 2160p Digital Inspection Microscope, x30 zoom with built-in illumination, on-board controls and rigid integrated stand

## Available as Full HD

HD-012  
HD-112



## Highlights

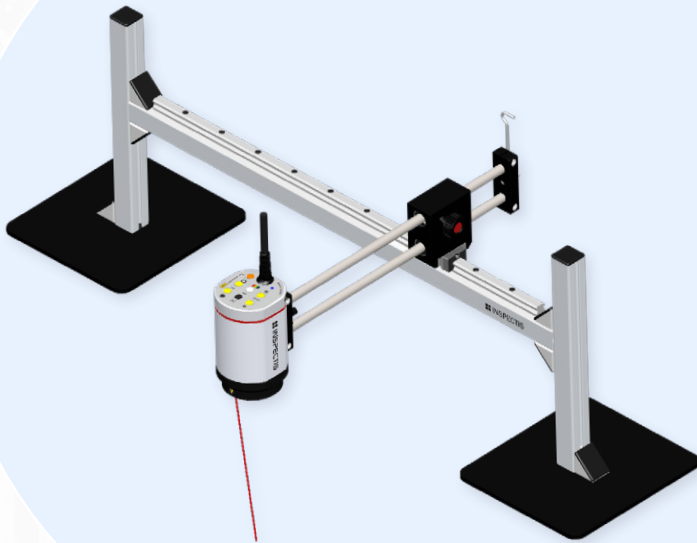
Robust, industry standard all-aluminium integrated stand with on-board camera and lens controls  
4K 30fps or FHD 60fps resolution with 30:1 zoom optics, auto-focus and plug & play HDMI and USB3.0 interface.  
Built-in LED matrix light with incident angle adjustment providing reflection free oblique illumination.  
Configurable as system packages SOFT with INSPECTIS© software or CAP with image/video capture on USB flash

# System Package: Bench-top XY-Travel

Bench-top imaging system with precise XY-translation for inspection of extra-large PCB panels  
4K digital microscope with premium image quality and on-board controls



Custom defined lengths & configurations



## Basic System configuration 4K

- Inspectis U30s (U10s) Ultra HD 2160p Digital Microscope
- XY-travel Stand, Table-top (custom-made X- and Y-lengths)

Available as Full HD



## Highlights

- Ultra High Definition (4K) 8.3 megapixel images for reliable inspection of fine details.
- Robust XY translation system for precise, smooth and non-contact moving of digital microscope over inspection object.
- Optional 4-direction tilt unit enables side-view inspection of components and solder joints.
- Compound HDMI and signal cable design offers excellent cable management.
- Options include ESD-protected housing and a built-in laser pointer.

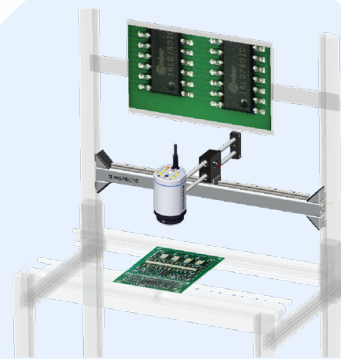
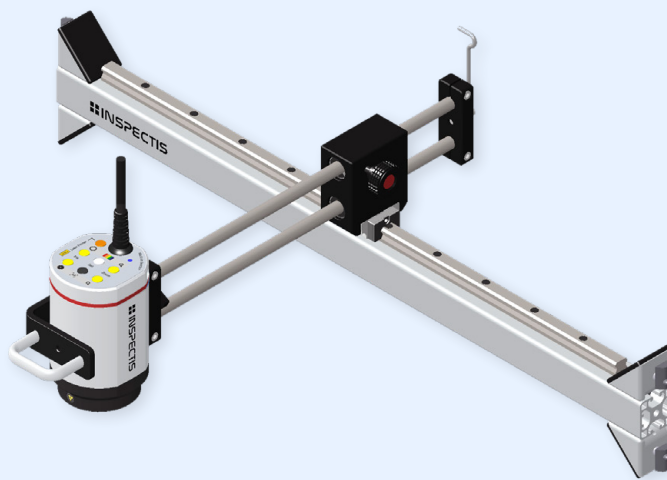


# System Package: In-line XY-Travel

In-line imaging system with smooth and precise XY-translation for installation in commonly used industrial racks



Custom defined lengths & configurations



## Basic System configuration 4K

- Inspectis U30s (U10s) Ultra HD 2160p Digital Microscope
- XY-travel Stand, In-line (custom-made X- and Y-lengths)

Available as Full HD



## Highlights

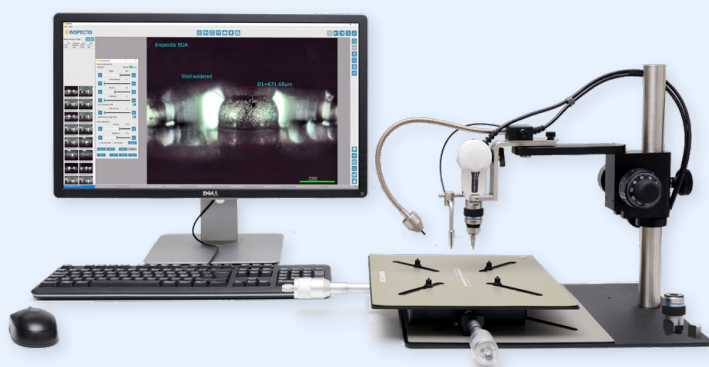
- Ultra High Definition (4K) digital microscope for ergonomic and reliable optical inspection in SMT assembly lines.
- Robust XY translation system for precise and smooth moving of digital microscope over PCB conveyor.
- Optional 4-direction tilt unit enables side-view inspection of components and solder joints.
- Compound HDMI and signal cable design offers excellent cable management.
- Options include ESD-protected housing and a built-in laser pointer

# BGA Inspection Systems

Premium imaging quality for fast and flexible inspection, measurement and documentation of hidden solder joints of BGA,  $\mu$ BGA, FlipChip, CSP, CGA and SMD components.



**BGA-002**



**Hand operated**  
BGA-003



Monitor and keyboard are illustrative and ordered separately

## System configuration ProX

- High-resolution 5.0MP digital inspection system with super-speed USB3.0 interface
- Interchangeable 90° varifocal lens with integrated stereo lighting for side-view BGA inspection
- Fibreoptics & Microprism background illumination unit with high-power LED light source
- Stand with Soft-touch and built-in  $\pm 90^\circ$  pivoting
- Precision XY-stage with quick-feed micrometer drives
- INSPECTIS© BGA image capture and measurement software

## Available as:

System package **Basics** BGA-001  
System package **Light** BGA-003

## Highlights

High resolution 5.0MP image sensor, high frame rate and superior image quality down to 100 microns stand-off. Standard probe 1.8mm tip thickness (6.6x1.0mm footprint) and small size 1.5 thickness (6.0x0.8mm footprint).

Dual Fibreoptics & Microprism background light with high power white LED and electronic dimmer.

Stand with built-in Soft-touch mechanism and  $\pm 90^\circ$  pivoting bracket.

Powered by INSPECTIS© ProX BGA Inspection, measurement, analysis, documentation and reporting software.

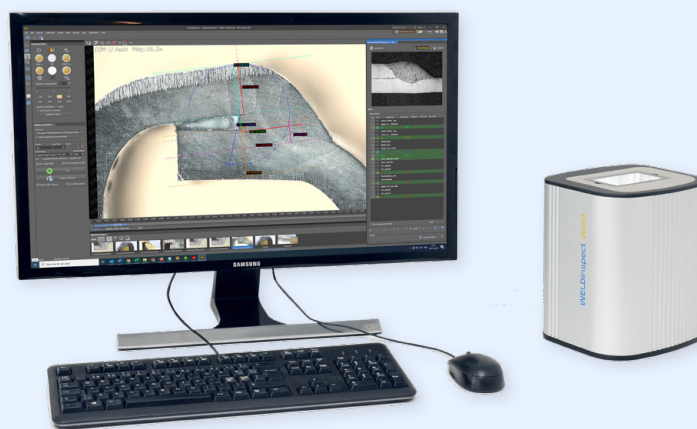
# Inverted Digital Microscopes

All-in-One Inverted Digital Microscope with 4K image quality, motorised zoom, auto-focus, and built-in large aperture soft illumination.

Powered by INSPECTIS© software for analysis, measurements, documentation and reporting



HD-250



Monitor and keyboard are illustrative and ordered separately

## System configuration DIM-U

- DIM-U, Inspectis boxed Inverted microscope 8.3MP Ultra HD with 7.5-196x on-screen magnification, 26x zoom, auto-focus and large aperture LED RingLight
- INSPECTIS© Basics image view and capture software with built-in camera and lens controls
- 4K USB Pro Capture device
- Hardened glass windows (5 pcs kit)
- Dust Cover for the instrument

Available as Full HD  
HD-240



## Highlights

All-included, plug & play, boxed digital microscope with pre-calibrated optics and built-in incident light for maximum ease of use. Optional bright-filed transmitted illumination for edge enhancement of objects and inspection of semi-transparent samples.

High resolution optical system with fast auto-focus and aperture control for outstanding image quality.

Robust extruded aluminium housing with steel base-plate and stainless-steel top-plate for highest stability.

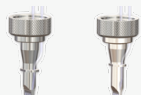
Powered by INSPECTIS© software with direct camera and lens controls.



 **INSPECTIS**

Quality of Inspection

## BGA Inspection Accessories



BGA-006, Interchangeable 90° side-view optical probe, standard size  
 BGA-007, Interchangeable 90° side-view optical probe, small size



BGA-014, Interchangeable fiber brush-light probe (spare part)



DM-010, Interchangeable 8-80x top-view varifocal lens with built-in LED-light



HD-126, Double-Spot LED Matrix Light with Gooseneck for top-view inspection



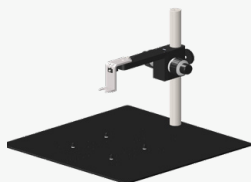
HD-051, USB Foot switch for INSPECTIS Software 1-pedal



HD-036, Bench-top holder for Digital Microscope



DM-012, Precision XY-stage with antistatic mat and magnetic pegs



BGA-015, Stand with Rack & Pinion, soft-touch and pivoting bracket for BGA



BGA-018, Aluminium Carrying Case for digital microscope, BGA lens and illumination



BGA-017, Flight Case with foam inlay for BGA ProX inspection system equipment

## DIM Accessories



HD-139, Nikon NIS Elements D software with sequential measurement and weld templates (Nikon Metrology item numbers may be used)



**INSPECTIS® ProX**  
 Image Capture and Metrology software

HD-133, INSPECTIS® ProX Image Capture, Metrology, Utility and reporting software



HD-130, 4K UHD PCIe Capture Device



HD-241, Hardened glass windows (5 pcs kit)



HD-245, Low-friction screen protector for glass window (5 pcs kit)



HD-242, Metallic window plate with circular aperture



HD-243, Calibration Micrometer Scale, 50mm, Div 1.0mm



HD-244, Calibration Micrometer Scale, 50mm, Div 1.0mm with accredited certificate (UKAS)



HD-248, Flight Case with foam inlay for digital inverted microscopes

# Stands & Mounts



HD-060, Single-arm Boom Stand  
HD-060-E, Single-arm Boom Stand, ESD-protected



HD-061, Single-arm Boom Stand XY-tilt module and Rack & Pinion Focusing Adapter



HD-060-EXT, Single-arm Boom Stand, 500mm WD  
HD-060-E-EXT, Single-arm Stand, 500mm LWD, ESD-protected  
HD-060-LWD-LB-E, Single-arm Stand, LWD with PCB holder ESD-protected  
HD-060-LWD-HD-E, Single-arm Boom Stand, LWD, Heavy Duty Base, ESD-Prot.



HD-070, Double-arm Boom Stand with Heavy-Duty Base



HD-071, Double-arm Boom Stand, Light  
HD-071-E, Double-arm Boom Stand, Light, ESD-protected



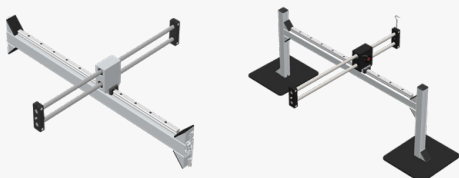
HD-080, Articulated-arm Boom Stand with Bench-top Clamp  
HD-081, Articulated-arm Stand 3-axis with Bench-top Clamp



HD-090, Rack & Pinion Fine Focusing module, Standard  
HD-090-CF, Rack-&Pinion Focusing module, Coarse/Fine



HD-210, Track stand with focusing WD 35-410mm  
HD-210-LB-E, Track stand, Large Base with focusing WD 35-410mm, ESD-Protected Base



HD-170, XY-travel Stand, In-Line  
HD-180, XY-travel Stand, Table-top

# Stages, Controls & Cases



HD-028, XY Floating Board  
HD-028-L, XY Floating Board with Position Lock



HD-029, Tilt Board  
HD-150, Tilt Board with Telescopic Height Adjustable  
HD-050, Telescopic Height Adjustment Table



HD-128, Magnetic pegs (4x kit)



HD-020, Remote Camera Control with Advanced Adjustments  
HD-200, Remote Camera Control with Knob Drive  
HD-200-MEM, Remote Camera Control, Knob Drive, programmable with 7 memories  
HD-201, Remote Camera Control PC software including Com. Cable



HD-027, Foot switch for camera control (2 pedals)



HD-020-C, Extension Cable (1.0m) for Remote Camera Controls



HD-040, Aluminum Carrying Case  
HD-111, Flight Case, Trolley-type for Inspectis U, F and C-type equipment



HD-172, Rack & Pinion Focusing module for XY-travel stands, Coarse/Fine  
HD-171, 4-direction Tilt Unit for Inspectis Stands  
HD-173, Camera handle grip for XY-stands  
HD-181, Z-movement bracket for XY-travel Stands



## Lenses, Lights & Monitors



HD-036, Macro lens +1 diopter, 67mm (singlet)  
 HD-037, Macro lens +2 diopter, 67mm (singlet)  
 HD-038, Macro lens +3 diopter, 67mm (achromatic)  
 HD-039, Macro lens +5 diopter, 67mm (achromatic)  
 HD-123, Macro lens +10 diopter, 67mm (achromatic)  
 HD-142, High Magnification lens +28 diopter, 67mm  
 HD-143, High Magnification lens +56 diopter, 67mm  
 HD-067, Lens protection filter, 67mm



HD-024-B, RingLight White LED with detachable diffuser



HD-024-P-U, Polarization filter set for Ring Light, 67mm



HD-025, RingLight UV LED



HD-125, Single-Spot LED Matrix Light with Gooseneck  
 HD-126, Double-Spot LED Matrix Light with Gooseneck



HD-127, Universal LED Backlight with intensity adjustment control



HD-104, 27"-28" 4K LED monitor (for U models)  
 HD-101, 24" Full HD LCD monitor (for F and C models)  
 HD-103, 22" Full HD LCD monitor (for F and C models)



HD-102, Inspectis 12" Full HD LCD monitor with post bracket for Inspectis Stands (for F and C models)

## Software & Image Capture



HD-043, 4K HDMI USB3.0 Pro Capture with INSPECTIS® Basics software  
 HD-044, 4K HDMI USB3.0 Pro Capture with INSPECTIS® Pro software  
 HD-044-PX, 4K HDMI USB3.0 Pro Capture with INSPECTIS® ProX software



HD-031, Full HD HDMI USB3.0 Capture with INSPECTIS® Basics software  
 HD-032, Full HD HDMI USB3.0 Capture with INSPECTIS® Pro software  
 HD-032-PX, Full HD HDMI USB3.0 Capture with INSPECTIS® ProX software



INSPECTIS® Basics  
 Image View and Capture Software

HD-131, INSPECTIS® Basics Image view and Capture software with Built-in Camera Controls



INSPECTIS® Pro  
 Image Capture and Metrology software

HD-132, INSPECTIS® Pro Image view, Capture and Metrology software with Built-in Camera Controls



INSPECTIS® ProX  
 Image Capture and Metrology software

HD-133, INSPECTIS® ProX Image view, Capture, Metrology, Utility and reporting software with Built-in Camera Controls



INSPECTIS® OAI  
 Overlay Assisted Inspection Software

HD-134, INSPECTIS® OAI, Overlay Edit and Display Software with Built-in Camera Controls



HD-130, 4K UHD PCIe Capture Device  
 HD-120-P, 4K HDMI USB3.0 Pro Capture device  
 HD-033, Full HD HDMI USB3.0 Capture Device



HD-140, Image Capture and Video Recorder for U microscopes  
 HD-140-F, Image Capture and Video Recorder for F microscopes



HD-042, SDK package for U and F series Digital Microscopes  
 HD-035, Inspectis USB communication Cable



HD-051, USB Foot switch for Inspectis Software 1-pedal  
 HD-052, USB Foot switch for Inspectis Software 3-pedal

## Performance

The Inspectis visual inspection systems feature cutting edge **4K** digital camera technology equipped with high resolution motorised zoom lens, pre-calibrated optics and swift, precise auto-focus. We design, manufacture, and deliver carefully specified optical systems with outstanding performance made from durable high-quality materials to make them fit for purpose with a long life in real working environments.

## Quality

Our quality management system is certified to **ISO 13485:2016** and **ISO 9001:2015**, and designed to ensure that all products are fit for their intended purpose, meet the required specifications for quality and safety and comply with regulatory requirements and marketing authorisation.

## Support

We are committed to being your strategic partner for digital optical inspection systems and be recognized as the technology leader that provides the highest standards of pre and after sales support. From the moment you engage with us and order an Inspectis product, you can be confident of receiving the best possible assistance including product training, software upgrades and help in the unlikely event of something going wrong.



Reseller

 **INSPECTIS**

Quality of Inspection

Inspectis Optical Systems  
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