



**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 or +5 diopter extra Lens
- White LED Ring-light incl. Diffuse and Transparent Filters
- Robust Track Stand with large Antistatic Base
- Antistatic XY-Floating Board with Magnetic Pegs
- INSPECTIS® Pro software with 4K USB3.0 Capture

## Available in Full HD

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



## Highlights

UHD 8.3 megapixel video with motorised zoom and 2x to 720x magnification range for careful inspection of fine details. Powered by INSPECTIS® software with camera and lens controls and pre-calibrated optics including 16 quick access memories.

Robust stand with precise 365mm axial-travel rack & pinion for easy adjustment of focus and object distance.

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

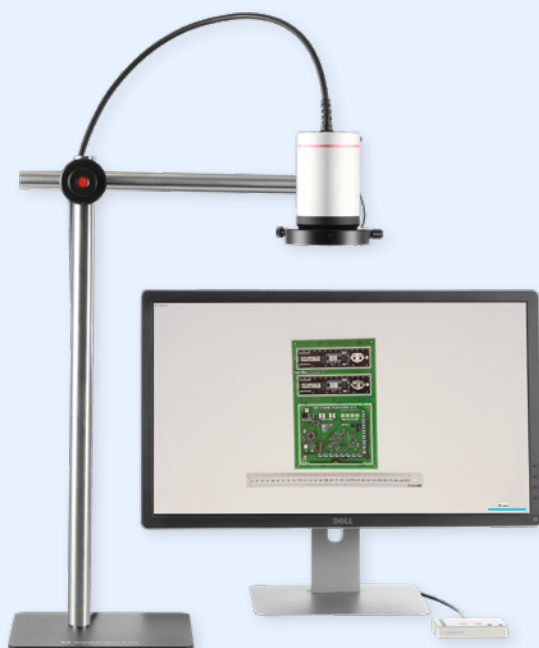
Options include ESD-protected housing and a built-in laser pointer.

# 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.



## HD-016-KIT-LWD



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



### 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 incl. Diffuse and Transparent Filters

### 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 camera with motorised 30:1 zoom and auto-focus for inspection of fine details. 550mm working distance and 700mm field of view with outstanding optical performance for inspection of large objects. Advanced remote control console with memory presets and foot switch output for hand-free control of camera and lens.

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

Options include XY-floating board, digital video/image capture, antistatic housing and a built-in laser pointer.

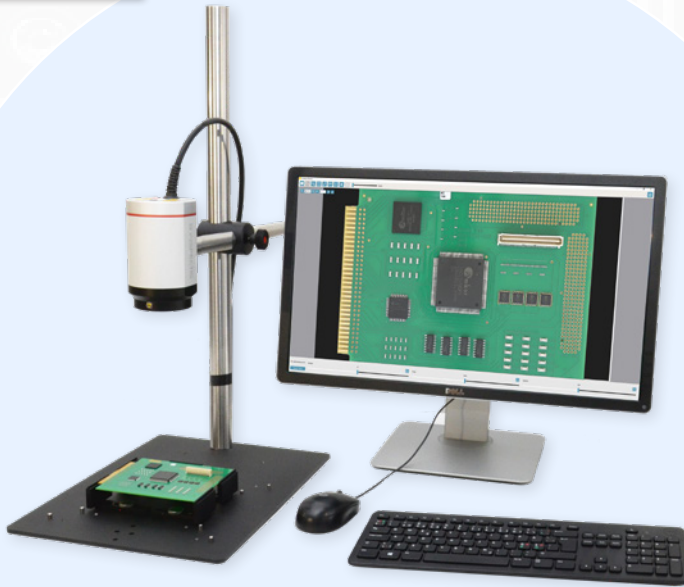
Monitor is illustrative and ordered separately

# 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.



**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 in Full HD

HD-113-KIT-OAI



## Highlights

Ultra High Definition 8.3 megapixel optical performance enables inspection of fine details over a 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 defects and errors.

Configurable as post-production or in-line inspection system together with XY-travel stands and stages.

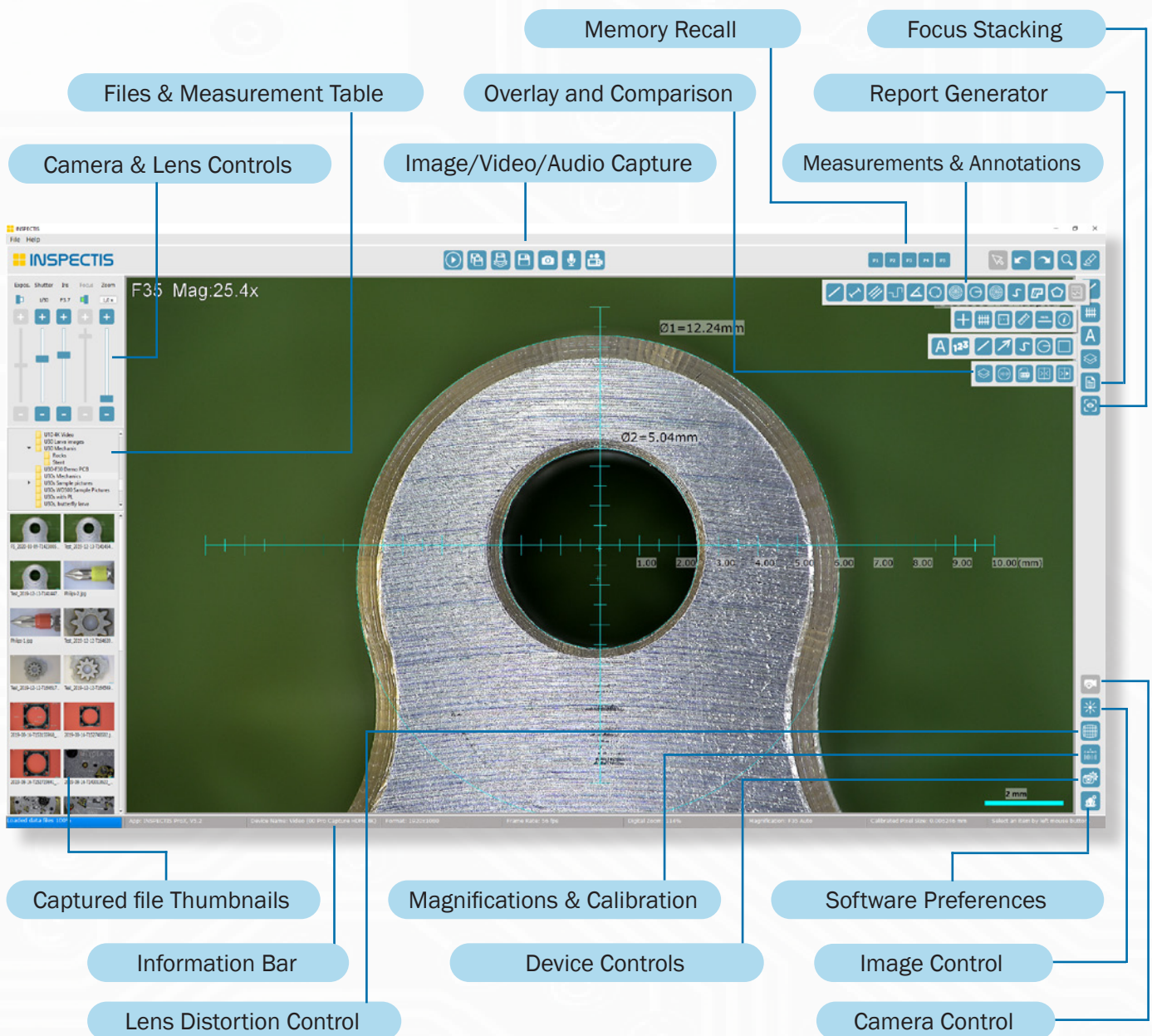


# Powered by INSPECTIS®

Inspectis systems are all powered by INSPECTIS®, software for video streaming, capture, measurement image processing, analysis, and reporting.

INSPECTIS® is supplied in 5 functionality levels, Basics Subscription, Basics, Pro, ProX and OAI.

Advanced tools for direct camera and lens control, distortion control, zoom tracking, focus stacking, 16 memory presets, drawings and notes, image overlay and comparison, DXF-import, time lapse video recording, data export, and report generator are provided based on software level.



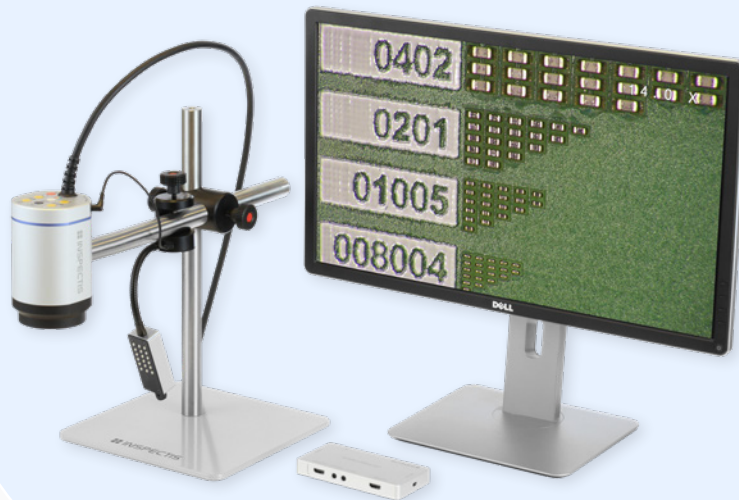
INSPECTIS® reduces the time for optical inspection in combination with image capture, analysis, measurements and documentation.

# 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.



**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 in 4K**  
HD-016-KIT-CAP



## Highlights

Cost effective FHD 60 fps resolution with motorised 30:1 zoom optics, auto-focus and video/image capture on flash memory.  
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 Package: Soft

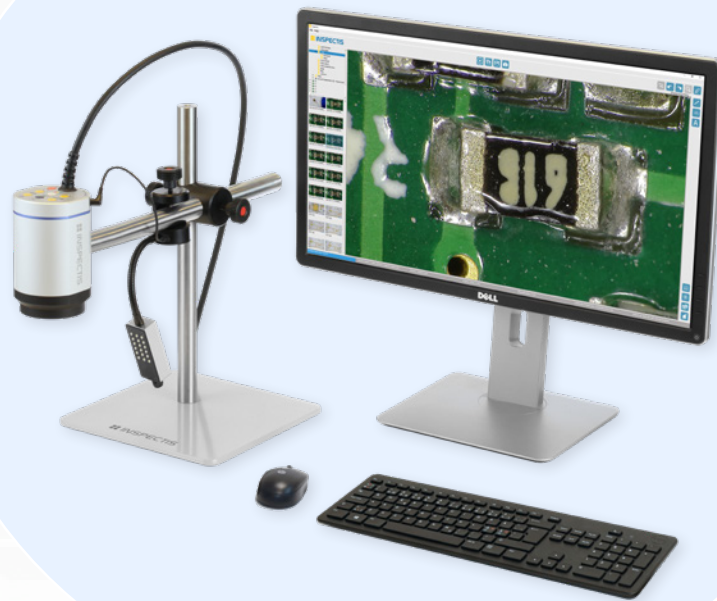
For optical inspection, image/video capture and documentation directly in the computer.

Full HD performance with high frame rate video streaming via USB3.0 interface.

Upgrade with INSPECTIS® Pro for measurements, image comparison, overlay and reporting.



**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 in 4K**  
HD-016-KIT-SOFT



## Highlights

Cost effective Full HD 60 fps resolution with motorised 30:1 zoom optics, auto-focus and plug & play USB3.0 interface.  
Powered by INSPECTIS® software with pre-calibrated zoom tracking, 16 memories and direct camera and lens controls.

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 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-KIT-CAP**  
**HD-015-KIT-SOFT**



## 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
- INSPECTIS© Basics with USB3.0 Capture (KIT-SOFT)
- 4K or FHD Image Capture and Video Recorder (KIT-CAP)
- 4K or FHD LCD monitor, 27"-28" (KIT-CAP)

## Available in Full HD

HD-012-KIT-CAP  
HD-012-KIT-SOFT  
HD-112-KIT-CAP  
HD-112-KIT-SOFT



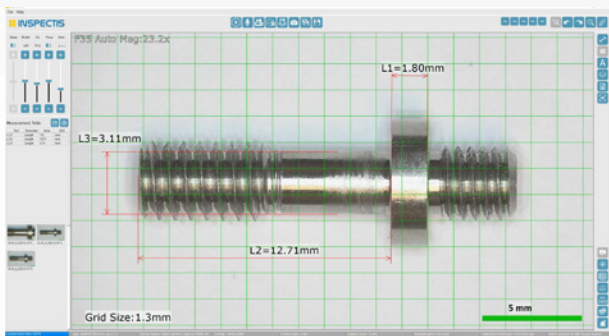
## Highlights

Robust, industry standard all-aluminium integrated stand with on-board camera and lens controls.  
4K or FHD video with motorised 30:1 zoom optics, auto-focus and plug & play HDMI and USB3.0 interface.

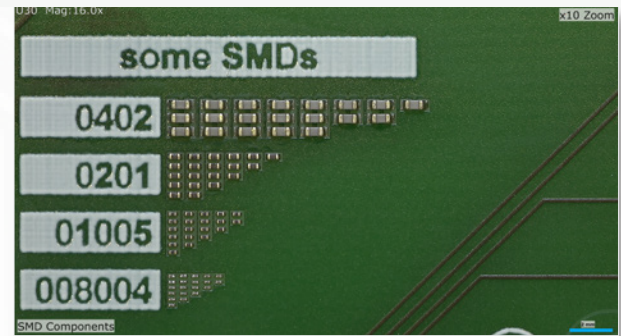
Built-in LED matrix light with incident angle adjustment providing reflection free oblique illumination.  
Configurable as system packages SOFT with INSPECTIS© software or CAP with image/video capture and monitor.



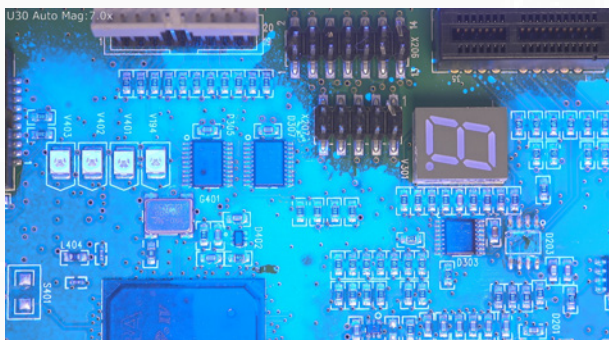
# Digital Microscopes for Modern Optical Inspection Tasks



Mechanical part with measurements in INSPECTIS® ProX



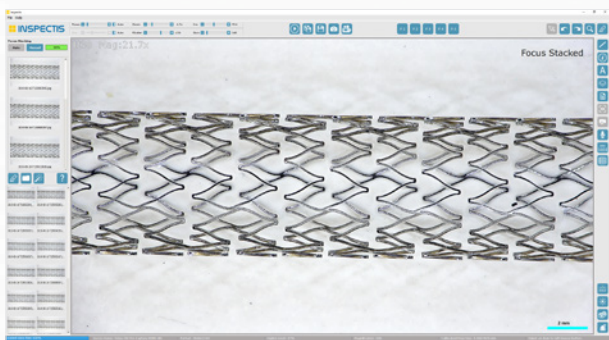
Electronics PCB captured in INSPECTIS® Basics



PCB with conformal coating, illuminated by UV ring light



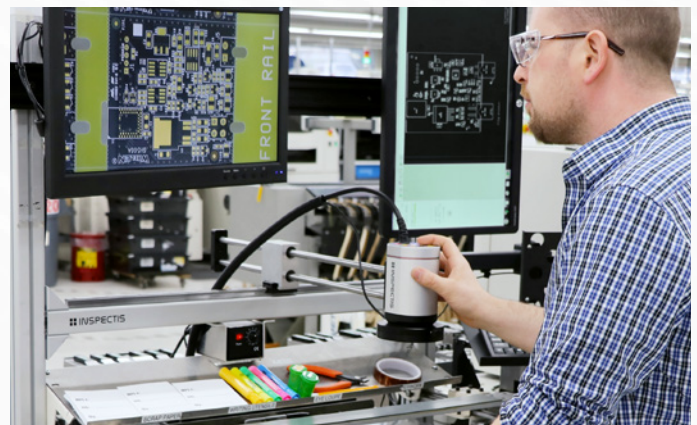
Cabbage seeds, illuminated with white ring light



Stent, illuminated by diffuse ring-light in INSPECTIS® OAI



Resistor, focus stacked in INSPECTIS® ProX

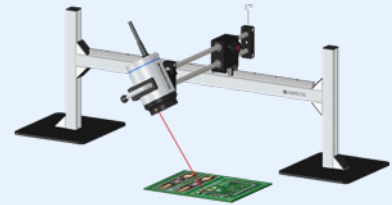
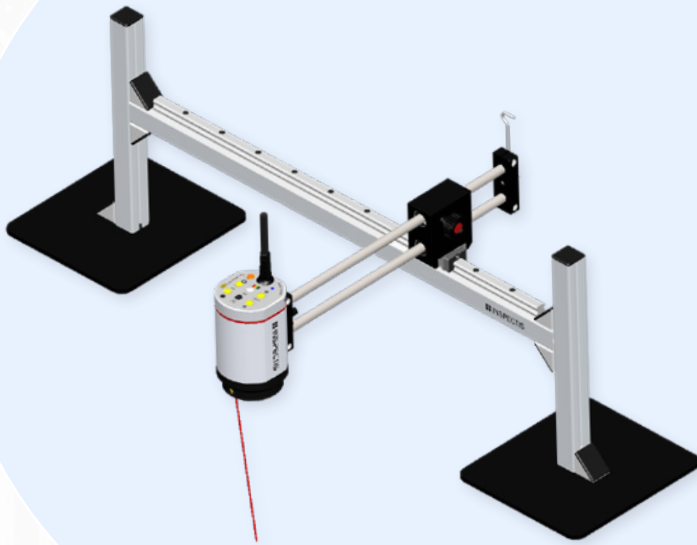


# System Package: Bench-top XY-Travel

Bench-top imaging system with precise XY motion for inspection of large objects  
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 in Full HD



## Highlights

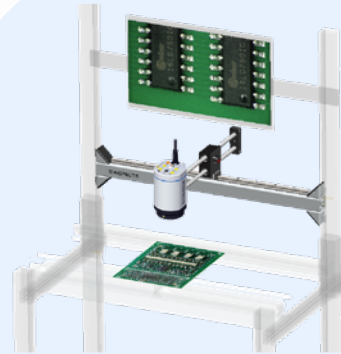
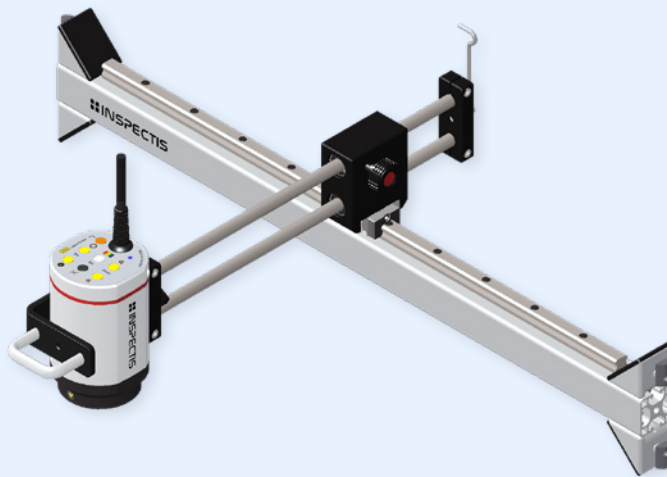
Ultra High Definition (4K) 8.3 megapixel images for reliable inspection of fine details.  
Robust XY translation system for precise, smooth and non-contact moving of digital microscope over inspection object.  
Optional 4-direction tilt unit enables side-view inspection of components and solder joints.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

# System Package: In-line XY-Travel

In-line 4K imaging system with smooth and precise XY motion 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 in 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 conveyor belts.
- 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, built-in laser pointer, and remote control consoles.

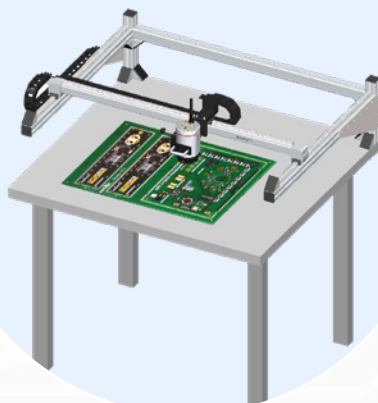
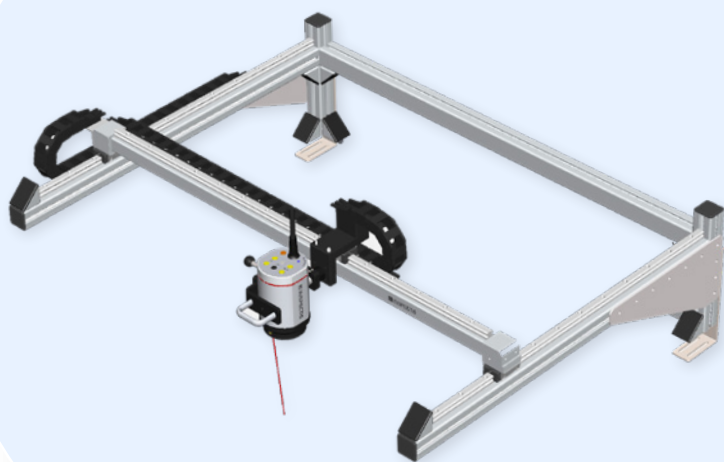


# System Package: Compact XY-Stage

Bench imaging system with precise XY motion for inspection of large PCBA panels.  
4K digital microscope with premium image quality and advanced controls



Custom defined lengths & configurations



## Basic System configuration 4K

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

Available in Full HD



## Highlights

Robust XY stage for precise movement of the digital microscope over the inspection object in-line or off-line.

Ultra High Definition (4K) with 30:1 zoom and auto focus for reliable inspection of fine details.

Optional 4-direction tilt unit enables side-view inspection of parts, components and solder joints.

Excellent cable management with long-life compound cable design and cable chain.

Options include remote control consoles, ring-light, and INSPECTIN® software.

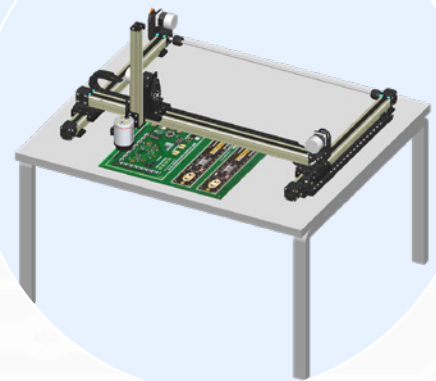
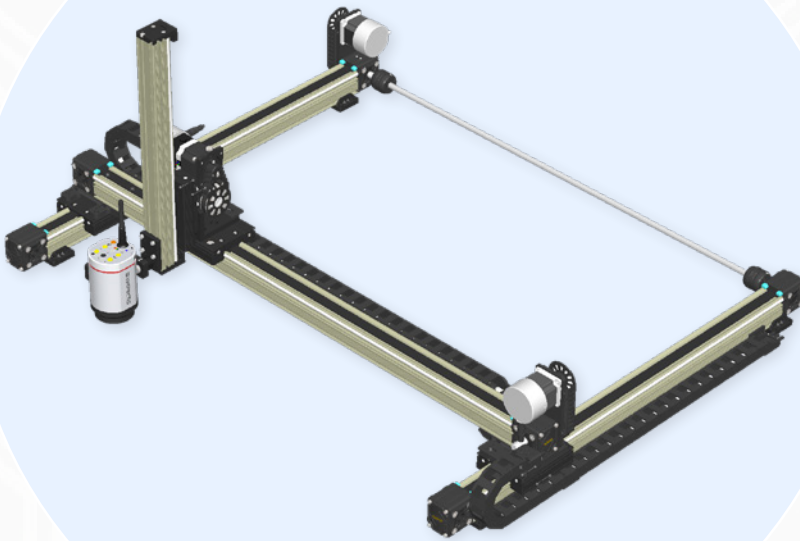


# System Package: Motorised XYZ-Stage

Bench imaging system with precise motorised XY motion for inspection of large PCBA panels.  
4K digital microscope with premium image quality and advanced controls



Custom defined lengths & configurations



## Basic System configuration 4K

- Inspectis U30s (U10s) Ultra HD 2160p Digital Microscope
- Motorised XY/XYZ Stage System (custom-made XYZ-lengths)
- Motion Control Software

Available in Full HD



## Highlights

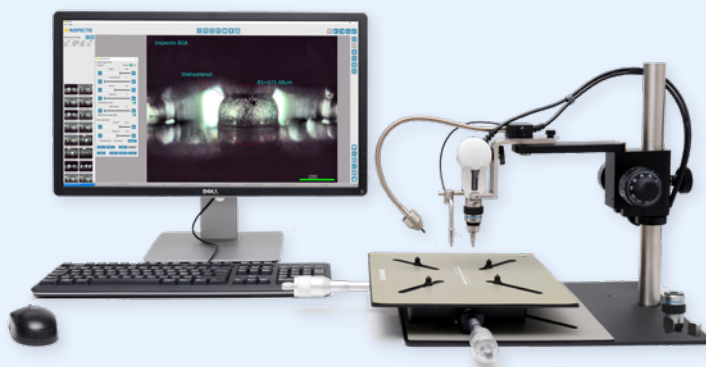
Robust XYZ motorised stage for precise movement of the digital microscope over the inspection object.  
Ultra High Definition digital microscope with 30:1 zoom and auto-focus for reliable optical inspection.  
Optional 4-direction tilt unit for side-view inspection of parts, components and solder joints.  
Excellent cable management with long-life compound cable design and cable chain.  
Options include API for advanced motion control, ring-light, and INSPECTIN© software.

# BGA Inspection Systems

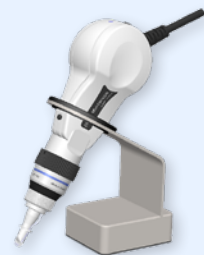
Premium imaging quality for fast and flexible inspection, measurement and documentation of hidden solder joints of BGA,  $\mu$ BGA, FlipChip, CSP, CGA and SMD components.



**BGA-002**



**Hand operated**  
BGA-003



## 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.

Monitor and keyboard are illustrative and ordered separately

# 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



Underneath-table mount



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 in 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 30:1 motorised zoom, 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, measurement tools and data export.



 **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



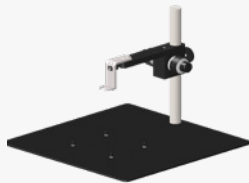
HD-051, USB Foot switch for INSPECTIS Software 1-pedal



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

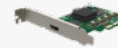


HD-139, Nikon NIS Elements D software for Weld Analysis (Nikon Metrology item numbers may be used)



**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-249, Light cover for WELDinspect



HD-257, Underside bracket for DIM, table mount



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



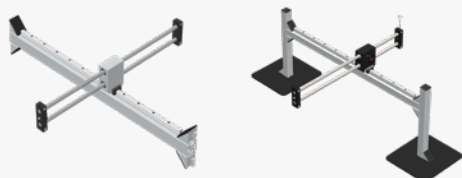
HD-080, Articulated-arm Boom Stand with Bench-top Clamp  
HD-081, Articulated-arm Stand 3-axis with Bench-top Clamp



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



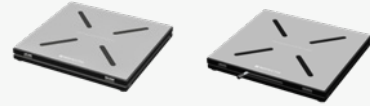
HD-210, Track stand with focusing WD 35-410mm  
HD-210-LB-E, Track stand, Large Base with focusing WD 35-410mm,  
ESD-Protected Base



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, programable with 7 memories  
HD-201, Remote Camera Control PC software including Com. Cable



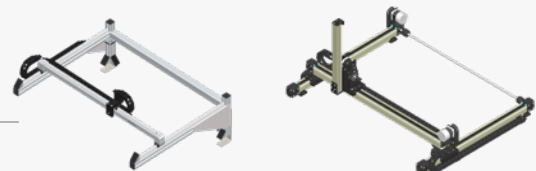
HD-027, Foot switch for camera control (2 pedals)



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-380/HD-390, Inspectis Compact XY-travel Stand, In-Line/Bench-top  
HD-390/HD-400, Inspectis Motorised XY-/XYZ-travel Stand



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-037-A, Macro lens +2 diopter, 67mm (achromatic)  
 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-106, 14" 4K LED Monitor with VESA mount (for U models)  
 HD-107, 15.6" 4K LED Monitor with VESA mount (for U 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



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



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



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



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 UHD digital imaging 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 Optical Systems  
Stockholm, Sweden  
[www.inspect-is.com](http://www.inspect-is.com)  
[info@inspect-is.com](mailto:info@inspect-is.com)