



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.

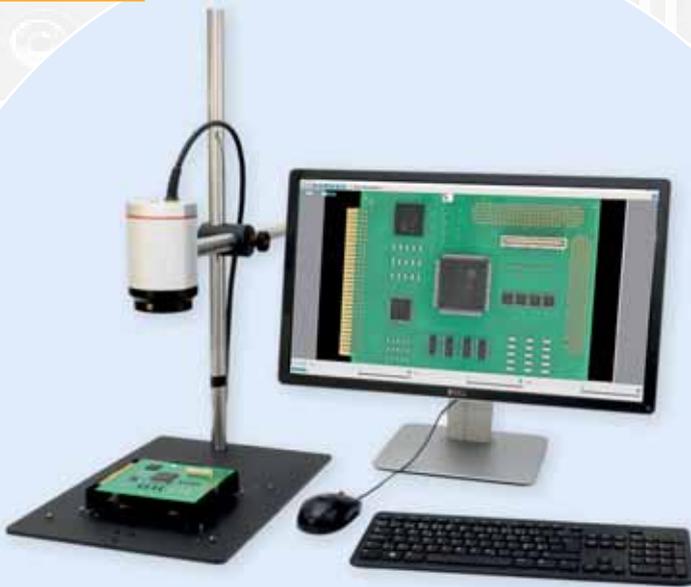
Options include ESD-protected housing and a built-in laser pointer

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 PCBs.

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

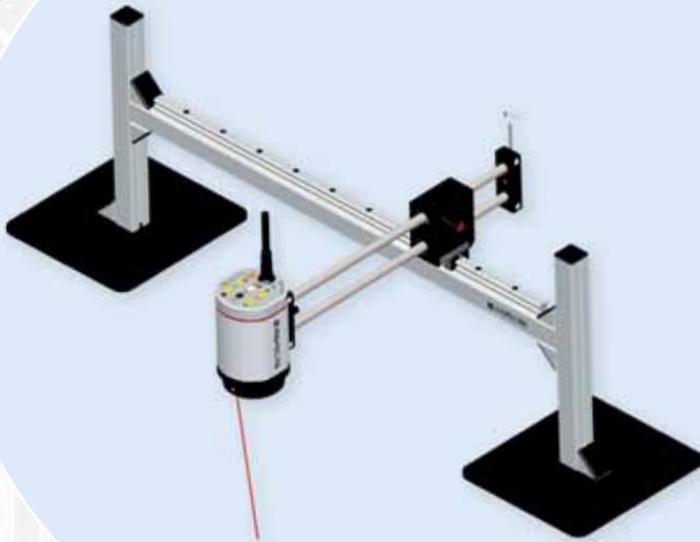
Robust, industry standard all-aluminium integrated stand with on-board camera and lens controls
4K 30fps or FHD 60fps resolution with 30:1 zoom optics, auto-focus and plug & play HDMI and USB3.0 interface.
Built-in LED matrix light with incident angle adjustment providing reflection free oblique illumination.
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

4K
ULTRA HD

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

1080p
FULL HD

Highlights

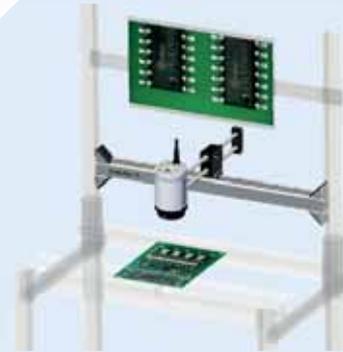
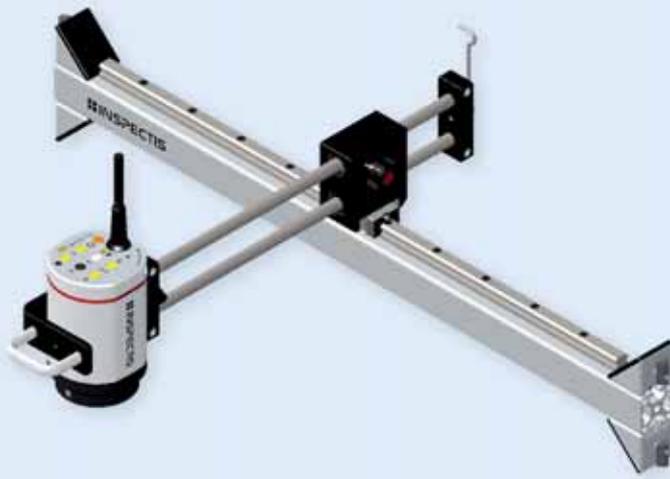
- Ultra High Definition (4K) 8.3 megapixel images for reliable inspection of fine details.
- Robust XY translation system for precise, smooth and non-contact moving of digital microscope over inspection object.
- Optional 4-direction tilt unit enables side-view inspection of components and solder joints.
- 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

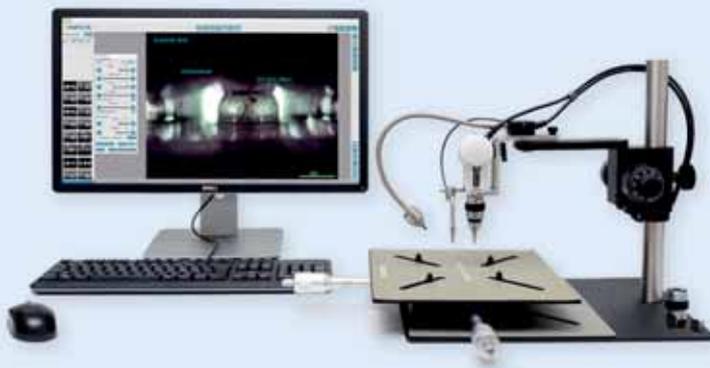
- Ultra High Definition (4K) digital microscope for ergonomic and reliable optical inspection in SMT assembly lines.
- Robust XY translation system for precise and smooth moving of digital microscope over PCB conveyor.
- Optional 4-direction tilt unit enables side-view inspection of components and solder 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, μ 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
- Fiberoptics & 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 Fiberoptics & 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-field 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



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 **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:



WETEC GmbH & Co. KG

Dönges-Straße 1
D-42929 Wermelskirchen

Tel. +49 2196 9756 2-0
Fax +49 2196 9756 2-99

www.wetec.de



Quality of Inspection

Inspectis Optical Systems
Stockholm, Sweden

www.inspect-is.com
info@inspect-is.com