Digital Microscope and Measurement System

INSPEX 3

Smart Inspection

Live x88.4

INSPEX 3

-REAL-TIME (60FPS) LENS DISTORTION CORRECTION-
-AUTO CALIBRATION TRACKING-
-SPOT FOCUS TECHNOLOGY-

Ash

INSPEX 3

Smart Inspection

Global Source
EQUIP TO INNOVATE

Ash

-REAL TIME (60Fps) LENS DISTORTION CORRECTION-
-AUTO CALIBRATION TRACKING-

INSPEX 3

-SPOT FOCUS TECHNOLOGY-
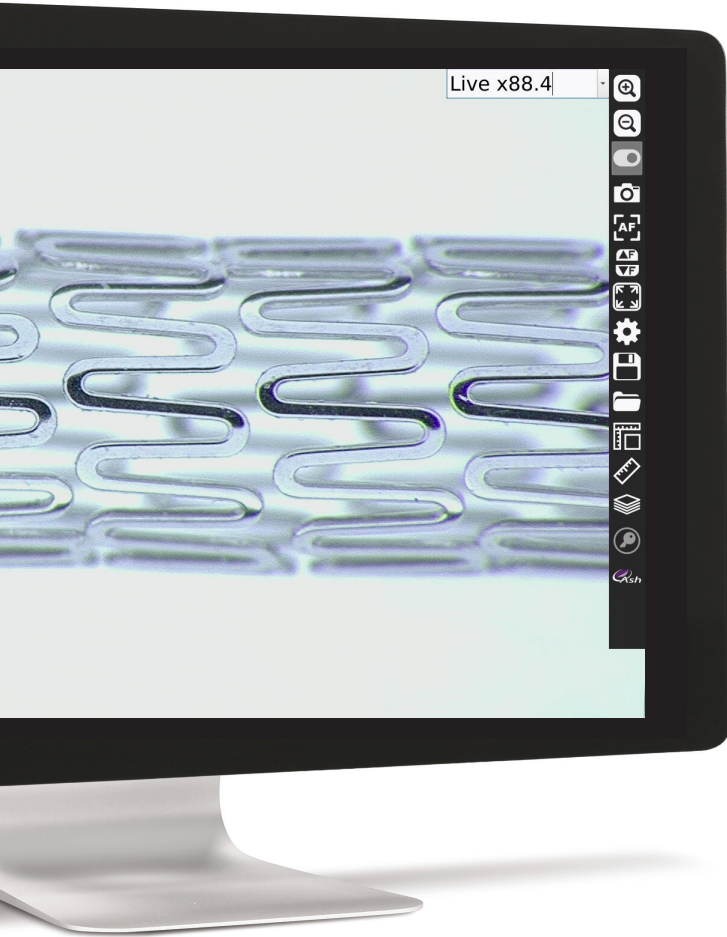
Simply Smarter

INSPEX 3

## Digital Microscope System

Inspex 3 is a powerful, flexible and intuitive HD digital microscope designed around ASH's new 30X HD Camera module.

This zoom camera module was designed by ASH to meet industrial inspection needs.

ASH has developed unique patented high-speed image processing algorithms deliver exceptional image quality, super-fast focus speed, and smooth digital zoom that makes inspection simpler, ergonomic and efficient.

Inspex 3 is ideal for industries such as medical device, pharma, precision engineering and electronics.

The benefits of the Inspex 3 system are clear to see.
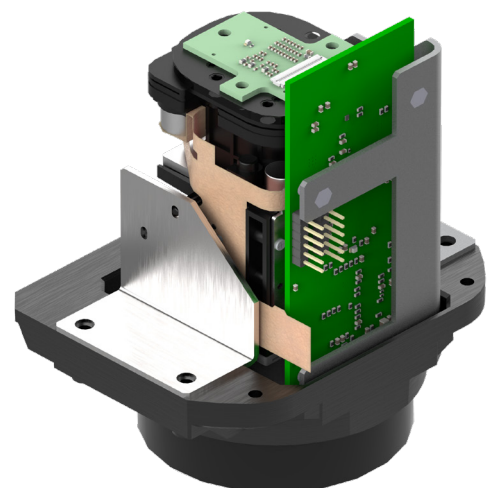
INSPEX 3

Smart Inspection

New Features

Inspex 3 is the latest evolution from ASH. Incorporating the AshCam™ module with a wide range of additional and improved capabilities.

Superb Image Quality

Experience unrivalled Full HD video imaging never seen before in an Ash system.

The Inspex 3 offers an enhanced, vibrant, crystal clear image for even the most demanding inspection applications.


Super Fast Auto-Focus

Place any part under the camera and it will immediately adjust the focus position allowing you to quickly and seamlessly inspect your part without having to adjust manual focus or change the height of the part.
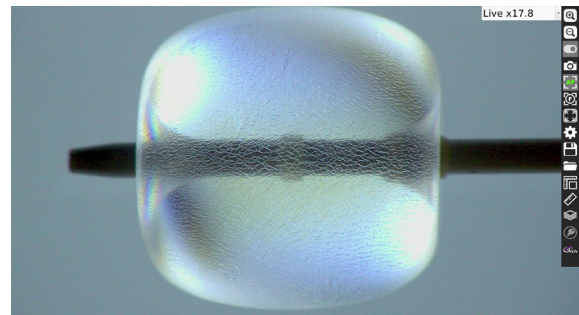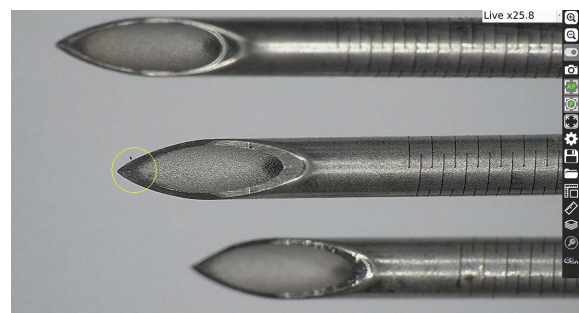

Manual Rocker Focus

Save time by quickly adjusting the focus using the rocker icon to inspect the area of interest on a sample part when in manual focus mode.
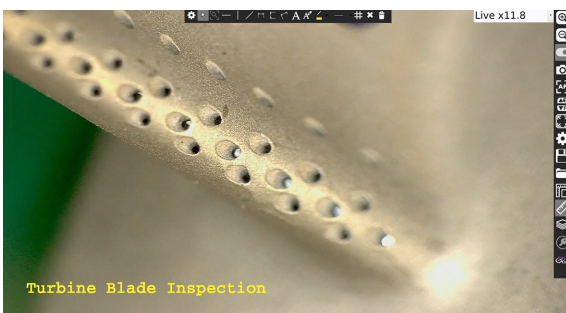
SpotFocus™

Quickly focus on the area of interest by simply using the mouse pointer.

Improve accuracy and reduce human error with the capabilities of Spot Focus.*



* Global patent applied for by ASH.

AshTruColour™ - True Colour Reproduction

View true colour reproduction of your sample with the Inspex 3. Replicate real and accurate colours as seen with the naked eye for true colour representation.


Advanced Camera Settings

The new Advanced Camera Settings gives the user more power to enhance the image for a wide range of inspection and measurement capabilities. Tailor sharpness, contrast, saturation and camera shutter speed to suit your particular application.
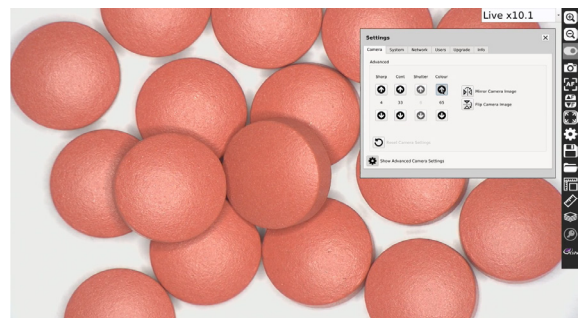
RTLDC™

Real-Time Lens Distortion Correction*. Lens distortion is inherent in all microscopes. Image distortion at the outer edges of large samples is automatically corrected by the Inspex 3.
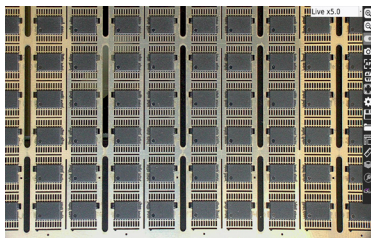
Inspex 3 RTLDC
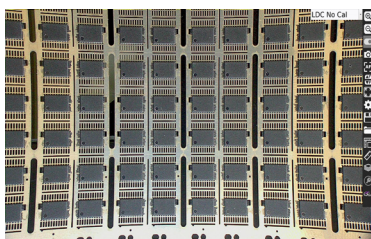
Without RTLDC

No Video Latency

The video from the Inspex 3 has zero delay. It's 3x times faster than our previous systems. View parts in real time with no video lag, allowing you to comfortably inspect, rework, modify and assemble any part. There is no delay between movement under the camera and what you see on the screen.

* Global Patent applied for by ASH.

INSPEX 3

Global Source
EQUIP TO INNOVATE

The Inspex 3 maintains the following improved great features introduced with the hugely successful Inspex II.

AshCal™

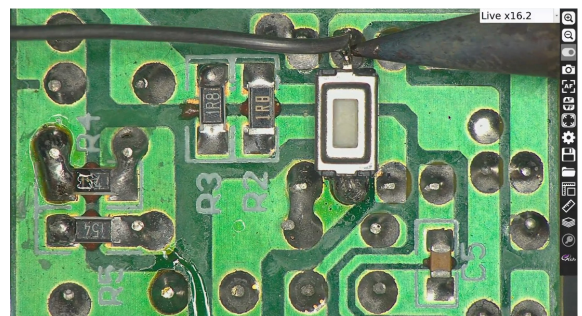Inspex 3 is factory calibrated before shipping. No time is wasted performing recalibrations between changing magnifications.

Image Stacking

Inspex 3 automatically captures several images at different focal depths to create a fully focused, sharp, clear image for easy inspection. Save time by removing the need to adjust the camera height or manual focus.

2D Measurement, Annotation & Graticules

Point to point measurement and annotation of samples and creation of graticules.

Save to Network

Networking enables direct saving to the server or cloud for increased workflow efficiency.

User Privileges

User privilege settings enables operational control and traceability. Assign multiple users with access to different settings and features, improving security and streamlining the inspection process.

On Screen Preset Buttons

On Screen Preset Buttons allow quick access to pre-configured part-specific system settings.

Interchangeable Lighting

Multiple types of interchangeable lighting available, including Ring Light, DomeLight, Polarised Light and UV Light to address any inspection application.

Image Stamping

Image Stamping with time, date, user and magnification level. Easy documentation & traceability for accurate quality control records using image capture to USB key.

INSPEX 3

Global Source
EQUIP TO INNOVATE

is the latest evolution

AshCal™
Automatic Calibration
Tracking

Improved
Auto-Focus Speed

New! Spot Focus

Rocker Focus

No Video
Latency

Improved
Depth of Field

Improved
Sensitivity

Smooth
Magnification
Zoom

RTLDC™

-REALTIME (60fps) LENS DISTORTION CORRECTION-

-AUTO CALIBRATION TRACKING-

-SPOT FOCUS TECHNOLOGY-

Ash

INSPEX 3

Simply Smarter

PLUGIN
AND GO!

INSPEX 3

Digital Microscope System

Global Source
E Q U I P   T O   I N N O V A T E

Smart Inspection

Applications

- In Process Visual Inspection, Rework and Assembly of Component Parts

- Connected for Traceability and Documentation. Store images and data on the Cloud.

- Large Scale Inspection in a Production Environment

- Final QC Release Inspection

Industries

- Medical Device Manufacture

- Pharma

- Precision Engineering

- Electronics

"

Steven Martin, Dakin Flathers

Dakin Flathers

"The ease of use has meant that we have had no issues with operator engagement and everyone who we asked insists it has taken away any degree of uncertainty that was always evident in analogue checks.

From a personal point of view, right from the initial demonstration through to the after-sales service, I cannot fault the staff at ASH, who have gone over-and-above to assist however they have been able. Possibly the greatest testament to the unit is that other sections within the factory have seen the potential it brings and have begun making their own case to me for the purchase of additional units. I have to say, it is only a matter of time!"

"

Pádraig McVeigh, Creganna - TE Connectivity

Conductix Wampfler

"ASH supplied a digital microscope system to help assessment of tube finishes without major impact to the overall cycle of production. ASH have provided excellent support from problem classification, through vision system development, right to fixturing and set-up support.

The speed of the response and ability to meet our tight timeline was very impressive.

The availability and assistance from team members of all levels, from Sales to Engineering, was invaluable to our team!"

"

Roland Rücker, Quality Engineer Optoelectronics, Germany

Heraeus Noblelight GmbH

"Our goal was to acquire a microscope with the smallest possible surface differences between 5 and 500 microns without fatigue. Likewise, we wanted to create sharp images with the abnormalities and these surveying. The implementation of these requirements has now been confirmed in practice by our employees. What also stands out

is the intuitive user interface our employees were able to use within a very short time. The support from their side for commissioning and technical questions is also to be positively emphasized. We can highly recommend this microscope because of our positive experiences and you as a partner."

INSPEX 3

FI 806-001

Global Source
EQUIP TO INNOVATE

System Components Included

LENSES
+5 Lens

LIGHTS
LED Ring Light

OTHERS
Wireless Keyboard and Mouse

USB Memory Stick

HDMI Cable

Optional System Components

LENSES

+5 Lens
AI 280-150

+10 Plan 1x Lens
AI 100-055

+25 Lens
AI 100-053

Ash 360 Rotating Viewer
AI 801-422

Polarising Lens (Analyser)
AI 100-041

Sub-Stage Polarising Film & Analyser
AI 801-835

Sub-Stage Polarising Film
AI 801-836

Polarised Ringlight & Analyser (58mm)
AI 801-423

LIGHTS

Diffused LED Dome Light
AI 100-045

UV Ring Light 367nm
AI 801-421

Polarised Ringlight & Analyser (58mm)
AI 801-423

CONTROLLERS

KPII External Keypad
FI 806-002

KIII External Keypad
FI806-003

OTHERS

Ash PC Capture
AI 100-052

24" Monitor
AI 801-416

Hard Carry Case
AI 801-563

STANDS & STAGES

XY Stage for Uplight
AI 100-011
▶ Illuminated Track Stand
AI 100-036

XY Stage
AI 100-010
▶ Track Stand
AI 100-037

Large XY Stage
AI 100-057
▶ Articulated Arm Stand
AI 100-039

▶ Dual Arm Boom Stand
AI 100-038

INSPEX 3

Digital Microscope System

216mm

165mm

165mm

170mm
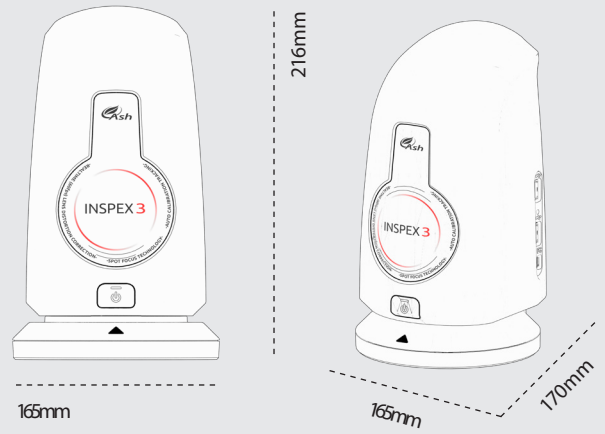
Magnification

	Lens Type	+5	+10 Plan 1x	+25
Optical	Magnification Range (X)	2.1 - 65.6	4.1 - 130	51.7 - 323.4
	X-axis FOV (mm)	240 - 8.34	80 - 4.1	3.5 - 1.75
	Y-axis FOV (mm)	135 - 4.69	71 - 2.2	1.75 - 0.9
Digital	Magnification Range (X)	66.1d - 131.6d	130.5d - 259.9d	325d - 646.7d
	X-axis FOV (mm)	8.34 - 4.13	4.15 - 2.08	1.65 - 0.85
	Y-axis FOV (mm)	4.69 - 2.32	2.32 - 1.16	0.9 - 0.5
	Working Distance (mm)	195	79	44
	Depth of Field (mm)	80 - 0.5	42 - 0.2	0.3 - 0.0015
	Video Latency (milli seconds)	20/17	20/17	20/17

Technical Specifications

INSPEX 3

	INSPEX 3
Zoom Range (with supplied +5 Lens)	2.1 - 131.6x
Camera Resolution	1920 x 1080 pixels
Monitor Connections	HDMI / DVI
Monitor Requirements	HD Ready / Full HD (Recommended)
Input / Output	HDMI Output USB 2.0 (x4 Ports) Mini USB Port General Purpose IO (x3 Ports) DC Power Jack 24V
Internal Storage	16GB
Image Capture	Internal Storage Removable USB Image Storage USB on the Go (PC Connectivity)
Power	24W
Dimensions	216mm x 165mm x 170mm
Weight	1.5kg
Operating Temperature	Storage -10°C to +60°C Operating +5°C to +40°C

Global Source
EQUIP TO INNOVATE

Contact Us

Ireland
ASH
B5, M7 Business Park,
Naas, Co. Kildare,
W91 P684, Ireland.
P: + 353-45-882212
F: + 353-45-882214

At Ash we design, develop and manufacture all our user centric solutions in-house and are proud of our award winning innovation process. We use creative Design Thinking to actively empathise with our customers to understand their real unmet needs and jobs to be done. We seek meaningful engagement and co-creation with our end users so we can develop the best possible solutions and services in the quality assurance industry resulting in cost savings, increased workflow efficiency, waste reduction and an overall improved quality process.

United Kingdom
ASH
Covert Farm,
Long Lane,
East Haddon,
Northamptonshire
NN6 8DU
UK
P: +44 (0)7592 523 767

E: info@ashvision.com
W: www.ashvision.com

reddot award
product design
winner

THE IRISH TIMES
INNOVATION
AWARDS 2017
RECOGNISING INNOVATIVE THINKING IN BUSINESS
MANUFACTURING WINNER:
ASH TECHNOLOGIES LTD
www.irishtimes.com/innovationawards

IRISH DESIGN AWARDS
INSTITUTE DESIGNERS IRELAND
WINNER 2016

nqa.
ISO 9001
Registered