



# Digital Microscope Inspection Systems



## Inspex HD 1080p Vesa

FI801-018

The Inspex HD 1080p is a high definition camera inspection system offering superb 1080p full HD image quality, colour reproduction, contrast and resolution. Its versatile design makes it compatible with a wide range of mounting options. Real-time on-screen dimensioning is provided by integrated XY grids and cursors.

### Key Features:

- Accurate & detailed inspection with superb HD image resolution, dynamic range of magnification levels & integrated LED illumination.
- Real-time on-screen dimensioning provided by integrated XY grids & cursors
- Less operator fatigue & improved production efficiencies due to ergonomic design enabling user to sit or stand in a comfortable and safe posture providing relief from back, neck and eye strain typically associated with traditional microscopes.
- Easy documentation & traceability for accurate quality control records using image capture to USB key.

### Applications:

The Inspex HD 1080p is suited for repair & rework, quality control & failure diagnosis processes in industries such as: Automotive, aviation, electronics, engineering, forensics, jewellers, medical devices, packaging & labelling, pharmaceuticals and security.



FI801-027

FI801-028

FI801-018

FI801-024





## KP1 External Keypad FI 801-008

The optional KP1 unlocks integrated real-time on-screen dimensioning grids and cursors. It also allows access to a variety of functions including 3 Memory Presets, Exposure and Focus, Zoom, Brightness, LED Intensity, Image Capture...



## MAGNIFICATION

Lens (Dioptre) (mm)	Focal Distance (mm)	Max Height (mm)	Min Height (mm)	Minimum Magnification* Optical/Digital	Maximum Magnification*	Field of view at minimum mag. (mm)	Field of view at maximum mag. (mm) Optical/Digital	Depth of field
4	250	250	205	1.8	51/98	X: 280 Y: 164	X: 10.2/5 Y: 5.5/2.4	100mm @1.8x 10mm @10x
5	200	200	170	2.3	62/122	X: 225 Y: 130	X: 7.9/3.9 Y: 4.2/2.1	80mm @2.5x 6mm @10x
10	100	100	90	4.4	121/237	X: 70 Y: 63	X: 5/2.4 Y: 2.2/1.1	2mm @30x 0.5mm @50x

## Technical Specifications

Specifications	Vesa (FI801-018)	Table (FI 801-017)
Zoom Range (with supplied lens)	5D Lens – 2.3x to 122x	4D lens – 1.8x to 98x
Camera Resolution	HD 1080p, 1980 x 1080 at 50/60 Hz	HD 1080p, 1980 x 1080 at 50/60 Hz
Monitor Connections	HDMI / DVI	
Monitor Requirements	HD Ready or Full HD (recommended)	
Dimensions	37cm x 12cm x 14cm	Table 24cm x 41cm
		Folded Height 11cm, Raised Height 42cm Weight
Weight	1.2kg	2.5kg
Power	8 Watts	
Operating Temperature	Storage: -10 C to +60C Operating +5C to +40C	
Image capture	USB 2.0 highspeed	

# Inspex HD 720p



## Inspex HD 720p

The Inspex HD 720p is a high definition camera inspection system offering HD image quality, colour reproduction, contrast and resolution. Its versatile design makes it compatible with a wide range of mounting options. Real-time on-screen dimensioning is provided by integrated XY grids and cursors.



## Data Capture Software FI 801-007

The optional capture cable allows Inspex HD 720p to save a HD frame to PC. Images can then be used for further processing or measurement analysis.



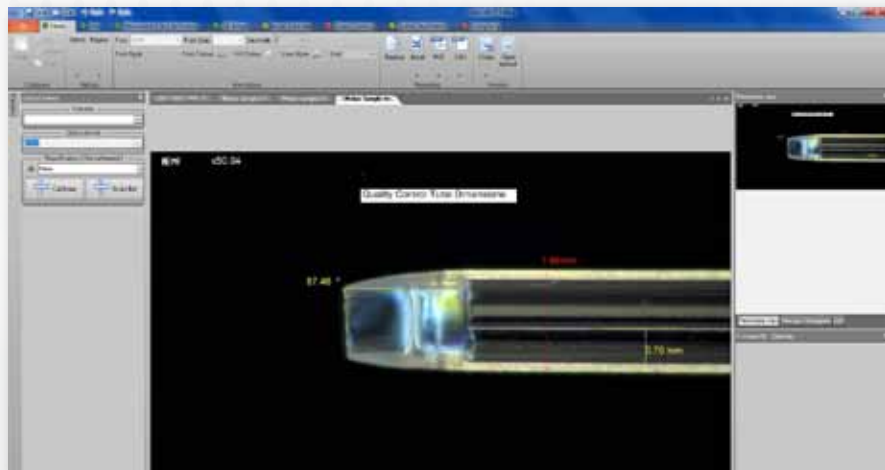
## Technical Specifications

Specifications	Inspex HD Table FI 801-011	Inspex HD VESA FI 801-010
Zoom range (with supplied lens)	4D lens – 2.0x to 48x	5D Lens – 2.5x to 60x
Camera resolution	HD 720p, 1280 x 720 at 50/50 fps	HD 720p, 1280 x 720 at 50/50 fps
Monitor connections	HDMI/DVI	HDMI/DVI
Monitor requirements	HD ready 720p with DVI or HDMI input	HD ready 720p with DVI or HDMI input
Dimensions	Table area: 24 x 41cm, Folded height: 9cm Raised height: 40cm	45cm x 12cm x 10cm
Weight	1.1kg	1.1kg
Power	8 Watts	8 Watts
Operating temp.	Storage: -10°C to +60°C Operating: +5°C to +40°C	Storage: -10°C to +60°C Operating: +5°C to +40°C

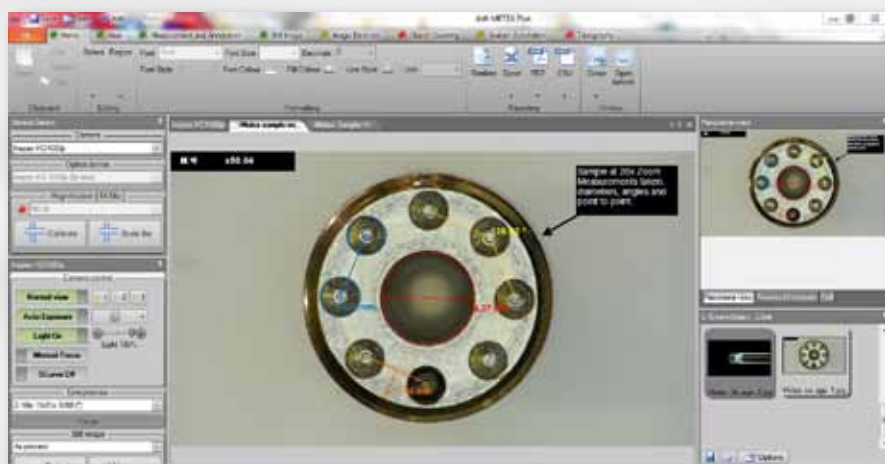


## Metex PC Measurement Software

The perfect Inspec partner, by any measure! Metex allows advanced measurement and live Full HD Video to your PC. With the included USB 3.0 interface Metex is ready to go out of the box.



## Metex Plus Control Inspec from your PC!



**Point to Point  
Measurement**



**Annotation**



**Image Comparison**



**View & Record Full  
HD Images & Video**



**Output Reports**



**Multiple Languages**

## Key Features:

- Obtain detailed dimensions for non-contact testing
- Angle, radius, centre point distances and perimeter values
- Annotation with customisable colours and font types
- Image Comparison
- View and record Full HD images and video
- Metric and Imperial units
- Output reports in common formats such as excel, pdf, csv
- Multiple Languages

## System Requirements & Specifications

<b>Hardware</b>	Compatible with most major chipsets and expended USB 3.0 via PCIe Gen1.1 x1, USB 2.0
<b>Operating System</b>	Windows 7,8,8.1
<b>CPU</b>	The processing of the video is done by the ASH Interface and will not occupy the CPU
<b>Video Output</b>	Up to 1920 x 1200 60fps
<b>Dimensions</b>	84.25 x 42.80 x 12.60 (LxWxH mm)
<b>Power</b>	<= 2.5W
<b>Operating Temperature</b>	Operating: 0 - 50 C Storage: -20 - 70 C



**reddot** design award  
winner 2012

## ion 4.3" Inspection Magnifier FI 800-102

The Ion 4.3 is an award winning inspection magnifier that provides a crystal clear image for the user. Suitable for quick and immediate use, the Ion is fast to start, comfortable to hold and highly intuitive to use as the product has been designed to replicate the look and feel of an optical magnifier.

The Ions display delivers an unrivalled sharp, bright and high contrast image. The Ion 4.3s stunning colour image and wide viewing angle provides comfortable use in awkward to access places and in poor lighting conditions. Its unique patent applied for dimensioning grids and cursors enhance the capability and efficiency of decision making for inspection operators and technicians.

### Key Features:

- **Accurate & detailed inspection of a wide variety of objects enabled** through lossless image quality & super sharp magnification up to 14x with high resolution TFT display and adjustable LED illumination.
- **Instant on screen measurement for quick & cost effective quality assurance** provided by integrated on screen XY dimensioning grids & cursor functions.
- **Easy recording & traceability of one hundred images with date stamp** using image capture software for accurate quality control records.
- **Mobile visual inspection tool suitable for awkward to access areas & poor lighting conditions** due to its compact, portable design.
- **Unique Liquid lens technology provides** a wide focus range, fast response time, excellent optical quality & low power consumption

### Technical Specifications

Specifications	Ion 4.3 <small>FI 800-102</small>
Screen size and resolution	4.3" diagonal TFT display, 480x272
Magnification	Far focus: 4x-8x & Near focus: 7x-14x
Image storage mode	100 images in 480 x 272 pixels, 24-bit bitmap format transferable to PC via USB link
Depth of field	3.5cm in overview, 1.5cm close
Dimensioning cursors/grids	Yes
Sensor	3MP CMOS, RGB565 video at 30fps
Battery – Lithium Ion	Up to 5 hours, charge time 4 hours
Connection cable	Micro USB cable
Charger supply	100V – 240Vac 50/60Hz with supplied adaptor
Unit supply voltage	5V dc, micro-USB connector
Weight	225 grams



## ion 4.3 Inspection Magnifier



Ergonomically positioned buttons for single handed access to all functions

Simple X, Y on-screen dimensioning with cursor & grid functions



Rechargeable via Micro USB

Adjustable LED illumination for brightness & left/right direction control

Flip out focus & stability leg





VESA compatible arm



Attaches to microscope stand

## Vista HD FI 802-002

The Vista HD is a fully integrated, high definition camera inspection system where HD camera, LED lighting & 19" monitor are contained in one single unit for fast, ergonomic and reliable optical inspection.

### Key Features:

- **Accurate & detailed inspection of a wide variety of objects enabled by** high quality HD image resolution, and a high performance HD camera with integrated LED illumination.
- **Instant on screen measurement for quick & cost effective quality assurance** provided by integrated on screen XY dimensioning grids & cursor functions.
- **Suitable for in line quality assurance inspection processes** using a unique 19" integrated display with all features & functions integrated to the one unit.
- **Less operator fatigue & improved production efficiencies due to its ergonomic design** enabling people to adjust their work position and allowing for group discussions & training.

### Technical Specifications

Specifications	Vista HD FI 802-002
Dimensions	45cm x 31cm x 12cm
Weight	3.95kg
Screen Size	19" display
Zoom	+3D lens as standard: Zoom range: 1.35x to 37x
Camera resolution	HD720p 1280x720 50/60 Hz
Power	48 Watts



## KP1 Keypad FI 801-008

Features:

- Activate Integrated XY Grids & Cursors for Dimensioning
- Camera, lighting functions & settings
- Adjust object viewing position using customisable on screen cross hairs
- Magnification, auto/manual focus & exposure
- 3 memory programmable pre-sets
- High contrast mode for enhancing objects like IC's
- Image freeze and capture of images to PC using capture cable



## Metex Measurement Software FI 803-001

- Obtain detailed dimensions for non-contact testing
- Angle, radius, centre point distances and perimeter values
- Annotation with customisable colours and font types
- Image Comparison
- View live Full HD Video and Capture images
- Metric and Imperial units
- Output reports in common formats such as excel, pdf, csv
- Multiple Languages
- Compatible with Win XP, Vista, 7 & 8
- USB 3.0 PC Interface Included

# Metex



## Data Capture Software for Inspex HD 720p FI 801-007

- Allows you to instantly capture a HD frame
- Images can then be used for further processing or measurement analysis
- Images can be easily stored in a variety of common formats including bitmap, JPEG & TIFF



# Stands & Stages

## Ergo Uplight Post Stand with Focus Block

AI 801-009

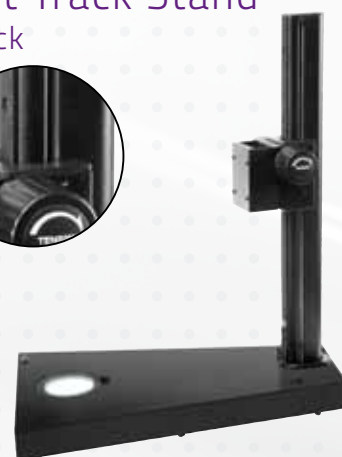
### Monitor Arm for Ergo Post Stand

AI 100-013



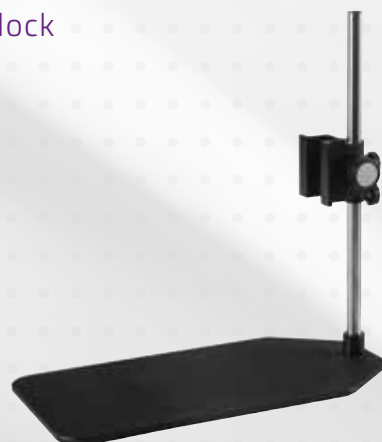
## Ergo Uplight Track Stand with Focus Block

AI 100-023



## Ergo Post Stand with Focus Block

AI 100-015, 016, 017



## Ergo Track Stand with Focus Block

AI 100-020, 019, 028



## X-Y Stage

AI 100-010



## X-Y Stage for Backlight with Scale

AI 100-011



## VESA Flexible Arm

AI 406-510



## Vesa Mounting Arm for Inspex & Monitor

AI 350-322



## X-Y Stage 15.7" x 14.1"

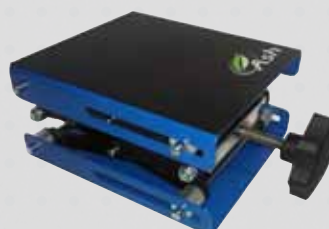
AI 801-412



## Height Adjustable Stage

6" x 6" AI 801-413

8" x 8" AI 801-420



## Oblique Tilting Stage

AI 801-414





# Lighting

## 8-Point LED Ring Light

AI 100-012



■ Polarizer  
AI 100-000

## Diffused LED Dome Light

AI 100-001



## Ultraviolet Ring Light

■ 254nm Wavelength

AI 100-026

■ 357nm Wavelength

AI 100-025



## LED Fibre Optic Illuminator

AI 100-002

Available Attachments

(sold separately):

■ Single or Dual Gooseneck

AI 100-005, 004

■ Ring Light

AI 100-006

■ Colour Filter Kit

AI 100-003

■ Polarizer

AI 100-007



## Foot Switch

AI 801-415



## 52mm Lenses.

3,4,5,10x, Polarizing Filter for InspeX



Lens 3x AI 280-129  
Lens 4x AI 280-125  
Lens 5x AI 280-123  
Lens 10x AI 280-124  
INSPEX Polarizer AI 280-125

## Monitor 24"

AI 801-416



## INSPEX Hard Case

Table AI 801-561



## INSPEX Soft Case

AI 801-566



## ION Hard Case

AI 801-567



# Other Accessories

For full details please visit [www.ash-vision.com](http://www.ash-vision.com)



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