

powering potential from the core



Digital Microscope & Measurement System





# **Flexibility to Configure**

Not all inspection needs and requirements are the same. That's why we've developed a platform to suit a multitude of tasks





# What can Omni Apps do for you?

# Increased Workflow, Speed & Efficiency.



### Connected

Save time by emailing directly from Omni.
Document directly to server or cloud network for traceability



### **Intuitive**

Intuitive mouse and keyboard GUI for simple and familiar user experience. Also recalls images from internal storage



### User Control

Create user privileges for ease of operation to meet the skills and tasks of the user



### **Customise Workflows**

Create custom
workflows to standardise
and control your
inspection

# Inspection & Measurement Applications

### 2-D Measurement & Annotation

Accurate measurement and annotation of lines, angles & circles to accomodate a multitude of samples



### **On Screen Graticules**

Create Go-No-Go on screen digital graticules to quickly identify sample defects





### **Focus Stacking**

Create a single high resolution image automatically from multiple focal planes making inspection easier and quicker



### **Image Comparator**

Rapidly identify differences between gold samples and test samples to improve Quality Assurance



### **Autocad DXF**

Import and modify autocad DXF files to create graticules for overlay comparison with critical parts

# **Flexibility**





# Customise with integrated apps

Total flexibility to configure software with a range of applications to suit your needs and budget

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### Compact Footprint

Fully integrated software avoids the expense and task of qualifying a PC

# Confidence in Measurement



### Calibrated for Industry

Calibrated to ISO 17025 standard. No need to calibrate. Maintains calibration while zooming providing trust in measurement



### Repeatable Measurement

Automatic edge detection for repeatable and reproducible measurements that significantly reduce variability

# **System Components**

# omni core

### **Included Components:**

+5 Lens LED Ring Light Wireless Keyboard and Mouse Memory Stick HDMI Cable



Email Save to Network User Privileges Lens Distortion Correction

### **Components**



+10 Lens AI 280-131 +25 Lens AI 100-053 Polarising Lens Al 100-041

### Stands & Stages



XY stage for Uplight AI 100-011 Omni Illuminated track stand. Al 100-036



XY Stage AI 100-010 Omni track stand. Al 100-037



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

Dual Arm Boom stand. AI 100-038

Motorized XY Stage AI 100-050 Works With Touchscreen Workflow Controller



Oblique tilting stage Al 801-414



### **Lights**



Diffused LED UV Ring Dome Light Light 367nm AI 100-045 AI 801-421

### **Others**



Touchscreen Workflow Controller. AI 100-049 Works With Motorized XY Stage



Ash PC Capture AI 100-052



24" Monitor AI 801-416



Hard Carry Case Al 801-563

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2D measurement,Annotation and Graticules AP 100-001

**Apps** 



Image Stacking AP 100-002



Image Overlay Comparator AP 100-003



Side by Side Image Comparator AP 100-004



DXF Import
AP 100-005
\*Requires Measurement App

# **Industries**

The flexibility of Omni core applications enables it to be utilized in a broad range of industries



# We are passionate about innovation and design

**Our awards** 

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.









## Magnification

	+5	+10	+10 Plan 1x	+25
Part Number	AI 280-150	AI 280-131	AI 100-055	AI 100-053
Max Mag	133.1	259.4	266.6	662.4
Min Optical FOV (mm)	231 x 136	60 x 50	71 x 71	3.09 x 1.73
Max Optical FOV (mm)	8.654 x 4.875	4.462 x 2.514	3.992 x 2.24	1.736 x 0.978
Dof @ min zoom (mm)	78	57	40	.025
Dof @ max zoom (mm)	0.5	0.2	0.2	0.01
Working Distance (mm)	200	100	76	35.1
FOV (mm)	3.99 x 2.239	2.047 x 1.149	1.992 x 1.118	1.992 x 1.118

Using a 24" Monitor

### **Technical Specifications**

Zoom Range (with supplied +5 Lens)	2.5 - 122x	
Camera Resolution	1920 x 1080, 30 Optical, 2x Digital	
Monitor Connections	HDMI / DVI	
Monitor Requirements	HD Ready / Full HD (Recommended)	
Input/Output	HDMI Output	
	USB 2.0 Port x4	
	Mini USB Port	
	RJ45 Ethernet Connector (Networking)	
	General Purpose IO Port x3	
	DC Power Jack 24V	
Image Capture	Internal Storage	
	Removable USB Image Storage	
	USB on the Go (PC Connectivity)	
Power	24W	
Dimensions	216mm x 125mm x 136mm	
Weight	1.75kg	
Operating Temperature	Storage -10°C - 60°C Operating +5°C - 40°C	

### **Package Contents**

- Omni core
- Quadrant Controllable Ring Light
- + Lens +5
- Mouse & Mat
- Keyboard
- Power Supply
- + HDMI to HDMI Cable
- Mini USB Cable (for PC connection)
- USB Memory Stick
  - Grounding Cable
- x2 Arm Brackets (For Standing Mounting)
- Arm Receiver
- User Manual
- Cleaning Cloth





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