

omni core

powering potential from the core



Digital Microscope & Measurement System



reddot award
product design
winner 2017

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**

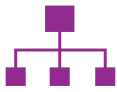
omni core

Start with the **core** then add your apps



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 accommodate 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



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

Apps

Lenses

- +5 Lens AI 280-150
- +10 Plan 1x Lens AI 100-055
- +10 Lens AI 280-131
- +25 Lens AI 100-053
- Ash 360 Rotating Viewer AI 801-422
- Polarising Lens AI 100-041

Lights

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



2D measurement, Annotation and Graticules AP 100-001



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

Stands & Stages

- XY stage for Uplight AI 100-011
- Omni Illuminated track stand. AI 100-036
- XY Stage AI 100-010
- Omni track stand. AI 100-037
- Articulated Arm Stand AI 100-039
- Large XY Stage AI 100-057
- Dual Arm Boom stand. AI 100-038
- Motorized XY Stage AI 100-050
Works With Touchscreen Workflow Controller
- Oblique tilting stage AI 801-414

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 AI 801-563

Industries

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



Medical Device



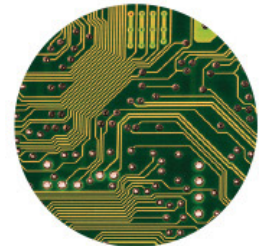
Aerospace



Automotive



Metallurgical/Precision Engineering



Electronics



Forensic Science



Conservation & Restoration



Jewellery/Watchmaking



Polymers/Plastics

We are passionate about innovation and design

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.

Our awards



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