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**

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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 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

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

Lenses

+5 Lens
AI 280-150

+10 Lens
AI 280-131

+10 Plan
1x Lens
AI 100-055

+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

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

Apps

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*

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

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

reddot award product design winner 2017

THE IRISH TIMES INNOVATION AWARDS 2017 ASH TECHNOLOGIES LTD

IRISH DESIGN AWARDS WINNER 2016 INSTITUTE DESIGNERS IRELAND

SFA National Small Business Awards INNOVATION WINNER 2016

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