Advanced
Digital Microscopes and Measurement Systems

omni core

powering potential from the core

reddot award
product design
winner

Powering Potential from the core

Key Features

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

AshCal™

All Omnis are factory calibrated before shipping. No time is wasted performing recalibrations between changing magnifications

RTLDC™

Real Time Lens Distortion Correction algorithm corrects lens distortion for consistent inspection across the entire field-of-view

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

Email

Save time by emailing directly from Omni

Independent of PC

Integrated software avoids the expense and task of qualifying a PC

omni

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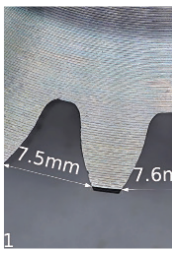
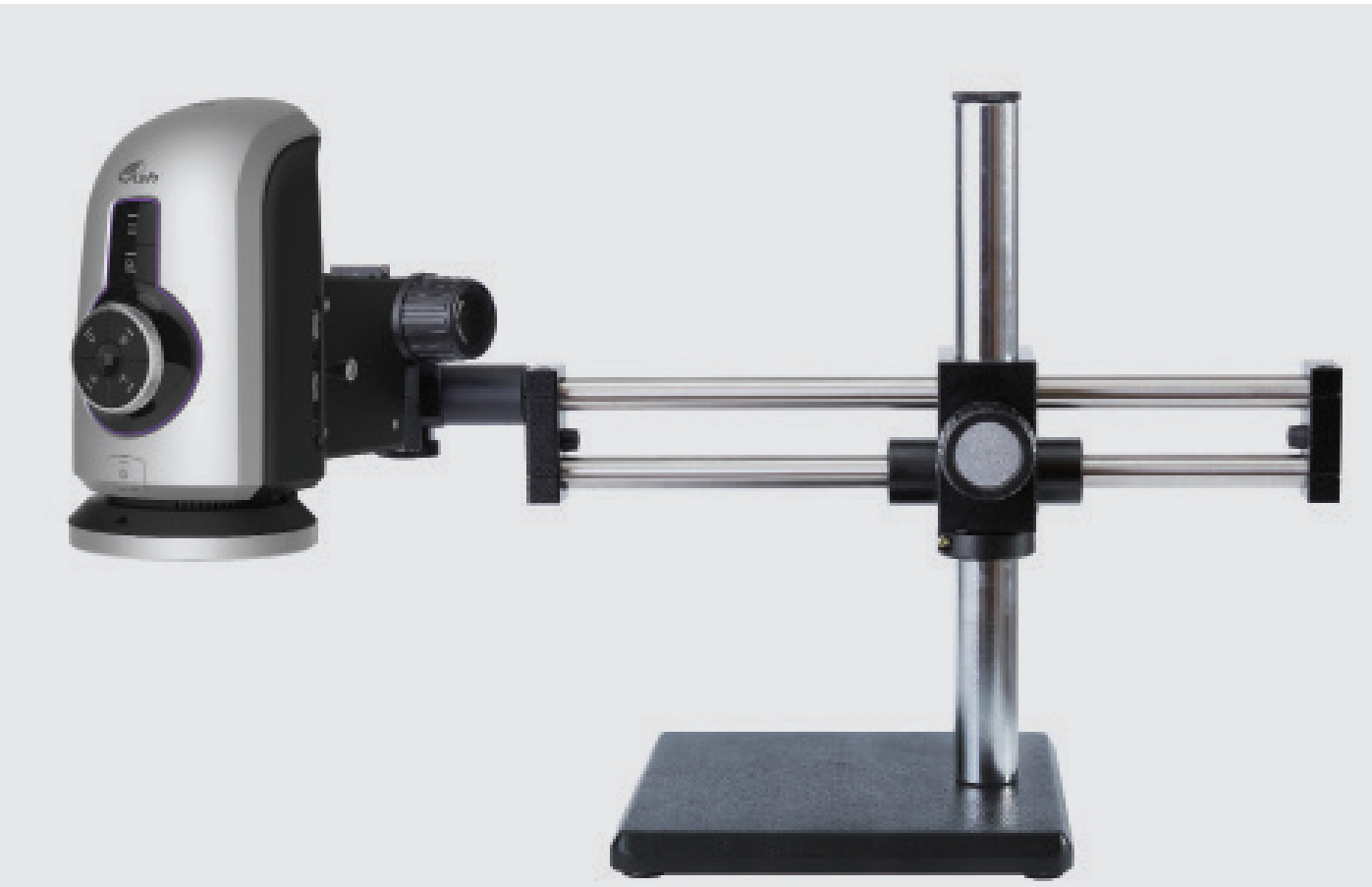

7.5mm



Start with the core set, then add your apps

Additional Apps

Up to 662x magnification

Up to 245mm x 139mmfieldofview

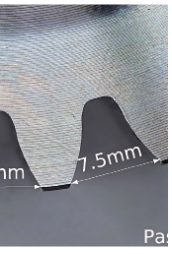
Up to 200mm workingheight

Side by Side Image Comparator

Visually compare your live sample image to a stored masterimageintheformofa split screen

Image Overlay Comparator

Identifydefectsbyoverlaying and flashing the live sample imageagainstastoredmaster image



2D Measurement & Annotation

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

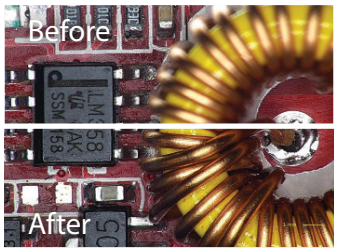
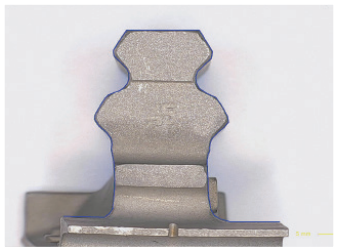


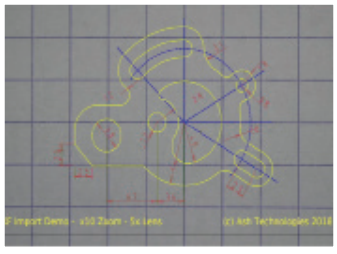
Image Stacking

Omniautomaticallycaptures several images at different focaldepthstocreateanimage basedonthesharpestregions from each capture



On-Screen Digital Graticules

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



Import and Export DXF

Import and modify autocad DXFfilestocreategraticulesfor overlaycomparisonwithcritical parts.ExportDXFfilesgenerated from edge detection on parts

Jonathan Higgins, Associate R&D Engineer

Ireland

Goodman Medical

"Working in the medical device industry I've come across many different inspection and measurement platforms, many of which are highly complicated and require constant maintenance and tech support to solve update and compatibility issues. Ash Technologies' OmniCore vision and measuring system is an all-in-one platform that provided a solution to all these issues.

It gives precision measurements and high resolution, high magnification images with a simple user-friendly interface with software applications that minimise error. The inspection applications not only make identifying defects an easy task, but also simplifies and speeds up operator training and measurement applications, ensuring accurate measurements every time. Software updates can be done at the click of a button with no need for IT support and additional applications can be added just as easily if required.

All in all, I would highly recommend Ash Technologies to anyone looking to simplify and improve their vision and measurement systems. I would also like to add that they have impeccable customer service which is always a plus."

Michael Mulvi, Quality Specialist

Ireland

Conductix Wampfler

The Omni vision system we purchased from Ash Technologies has given us the ability to measure dimensions on our plastic moulded parts that we previously did not have the capability to do. In sourcing this, capability has greatly improved our ability to obtain timely approval from our customers for the new products we are constantly adding to our range.

The Image Stacking function on the Omni vision system is a feature that we have found useful. We use many bought-in high precision components on our assembly line. The Image Stacking function enables us to quickly produce high magnification photographs to highlight to our suppliers any quality issues or areas for improvement. Our suppliers greatly appreciate the precision measurement and quality of the images we can now provide them with.

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."

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FI 805-002

Included System Components

LENSES

+5 Lens

LIGHTS

LED Ring Light

OTHERS

WirelessKeyboardandMouse

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

PolarisingLens(Analyser)
AI 100-041

Sub-StagePolarisingFilm& Analyser
AI 801-835

Sub-StagePolarisingFilm
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

CONTROLLERS

KPII External Keypad
FI 806-002

KPIII External Keypad
FI 806-003

Touchscreen Workflow Controller
AI 100-049
WorkswithmotorizedXYstage

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
▶ ArticulatedArmStand
AI 100-039
▶ DualArmBoomStand
AI 100-038

Motorized XY Stage
AI 100-050
Works with touchscreen workflow controller

ObliqueTiltingStage
AI 801-414

OMNI

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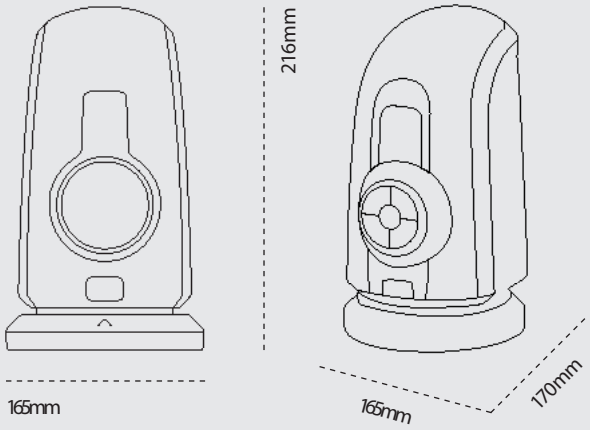
and Measurement System



Magnification

	Lens Type	5	10 Plan 1x	25
Optical	Magnification Range (X)	2.2 - 65	4.3 - 131.0	171.6 - 331.0
	X-axis FOV (mm)	245.0 - 8.2	123.0 - 4.0	3.08 - 1.6
	Y-axis FOV (mm)	139.0 - 4.6	71.0 - 2.2	1.7 - 0.9
Digital	Magnification Range (X)	66d - 131.7d	132.0d - 263.9d	332d - 662.4d
	X-axis FOV (mm)	8.2 - 4.02	4.0 - 2.0	1.6 - 0.8
	Y-axis FOV (mm)	4.6 - 2.2	2.2 - 1.1	0.9 - 0.45
	Working Distance (mm)	200	76	35

Technical Specifications

	OMNI
Zoom Range (with supplied +5 Lens)	2.2 - 131.7x
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 RJ45EthernetConnector(Networking)
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	1.75kg
Operating Temperature	Storage -10°C to +60°C Operating +5°C to +40°C

www.ash-vision.com

Authorized Dealer:
Meyer Instruments, Inc.
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Houston, TX 77084
www.meyerinst.com
281-579-0342

At Ash we design, develop and manufacture all our user centricsolutionsin-houseandareproudofourawardwinning innovationprocess.WeusecreativeDesignThinkingtoactively empathisewithourcustomerstounderstandtheirrealunmet needsandjobstobedone.Weseekmeaningfulengagement andco-creationwithourenduserssowecandevelopthebest possiblesolutionsandservicesinthequalityassuranceindustry resultingincostsavings,increasedworkflowefficiency,waste reduction and an overall improved quality process.

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THE IRISH TIMES
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MANUFACTURING WINNER:
ASH TECHNOLOGIES LTD

IRISH DESIGN AWARDS
INSTITUTE DESIGNERS IRELAND
WINNER 2016

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ISO 9001
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All systems are now multilingual.
Images,descriptionsandtechnicaldatasubjecttochange.Ashreservetherighttomakechangeswithoutnotice.
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