

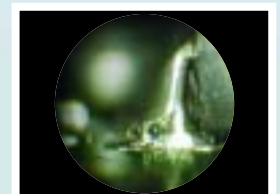
### THERE'S NEVER BEEN A QUICKER, MORE COMFORTABLE AND EFFECTIVE WAY TO INSPECT BENEATH ELECTRONIC COMPONENTS



#### OLYMPUS SolView - HAND HELD INSPECTION PROBE

Introducing Olympus SolView, a simple and cost-effective tool to inspect the quality of Ball Grid Arrays (BGAs) and other surface mount electronic components. Battery power eliminates the need for external power supplies, making this a truly portable inspection solution.

This innovative design concept employs easily adjustable front and back LED illumination, and offers clear, bright images with the exceptional quality expected from Olympus products.



#### HIGHLIGHTS

- The only hand held probe for eyeball inspection
- Available for quick and efficient SMD inspection
- ESD approved
- Battery operated for portability
- Superior and robust optics
- Excellent image clarity and superb resolution
- Small tip footprint with LED illumination
- Wide field of view
- Low entrance pupil height
- Complete system solutions, including stage, camera & measurement software
- Ergonomically perfected
- Adjustable LED backlight
- CCTV compatibility

# HIGH PERFORMANCE OPTICS RESULTING IN SUPERIOR IMAGE QUALITY

## OPTICAL ACCESS

*SolView-90* offers a low pupil height of 0.3mm, enabling accurate board level inspections of solder joints. In addition to the lateral probe, *SolView-00* is a direct viewing probe that allows you to view components from a range of angles and distances from 0.5mm to infinity.

The optics are internally housed within the probe's body, increasing the system's robustness. The focus can be adjusted easily to achieve the best view for your requirements. A wide field of view with no distortion and excellent image quality allows rapid inspection.



## ILLUMINATION

LEDs in the tip provide a bright white light which is beneficial for viewing between closely packed solder joints. For additional illumination, an LED backlight is supplied with *SolView-90* which is instantly powered when attached to *SolView*. This provides extra light directed to the rear of the solder balls, thereby increasing the depth of examination.



## ERGONOMICALLY SOUND

*SolView* has been designed with all aspects of human to product ergonomic interactions in mind. *SolView* is a delight to use for quick inspections. A 32mm eyepiece allows the probe to be connected to the extensive Olympus range of CCTV and viewing adaptors. For those who require instant access, a recessed metal bar is integrated into the body of the probe to attach either a hand strap or sprung lanyard.



## MAINTENANCE HAS NEVER BEEN EASIER

*SolView* is manufactured to the highest quality. The probe tip is fabricated in aluminum providing a lightweight and durable housing for the prism and two surrounding illumination LEDs. The viewing prism is recessed below the working surface of the tip of the body and is therefore protected from abrasion, requiring only a routine wipe clean to remove dust for maintenance. *SolView* is powered by two AA batteries, either standard or rechargeable, providing at least 8 hours of continuous use. Replacement can be performed easily without tools, making *SolView* extremely portable.

## OLYMPUS OMNISTAGE

Olympus OmniStage brings a refreshing new concept to XYZ stage design and is a versatile addition to *SolView*, as it provides a convenient base for inspecting printed circuit boards (PCBs) over extended periods. OmniStage has a multi-directional platform that can be translated 305mm in the X axis, 75mm in the Y axis and rotated 360° to allow optimum presentation of the component under inspection. It allows smooth and fluid movement of the platform with low stiction, and Z movement is achieved by the counterbalanced mounting arm of the OmniStage, which also eliminates any load that would otherwise be applied by the probe to the PCB under inspection.



## HIGHLIGHTS

- 440mm Diameter Platform for 300mm x 300mm PCBs
- Multi-directional Platform
- ESD Approved
- Counterbalanced Arm
- Position Stops
- Portable
- Easy Assembly and Maintenance
- CCTV Camera, Digital Camera or Eyeball Viewing Attachment
- Magnetic PCB Support Pillars for Quick Setup & Inspection (patent applied for)

# ENHANCE YOUR INSPECTION WITH OLYMPUS ANCILLARY EQUIPMENT



## BENCH STAND

The bench stand is a lightweight and stable structure that can be placed conveniently alongside the working area to safely hold *SolView* when not in use.



## CCTV EQUIPMENT

*SolView* may be used with CCTV to capture images that can help inspectors analyse defects at a later date.

A wide range of digital cameras is available from Olympus to provide high quality and high resolution images. The advantages of digital technology include the ability to view images immediately, they can then be e-mailed, inserted into word processor documents or presentations. Digital cameras are easily connected to the eyepiece of *SolView* using an Olympus borescope adaptor. C-mount adaptors are available for the connection of TV cameras.



## NEW *i-SAVE*

The Olympus *i-SAVE* is a stand-alone portable image capture, preview and storage device. An internal rechargeable battery provides approximately two hours run time. The XC-555 video camera can be powered directly from the *i-SAVE* via the appropriate accessory cables. Still and moving images can be saved to a Compact Flash card and downloaded to a PC for later analysis.

## Discover “SIS Software” for an analytical approach to inspections

Olympus Discover Essentials software helps to optimise the inspection process by facilitating linear measurement for quality and process control. The software allows digital cameras, CCTV equipment, Olympus *SolView* and OmniStage to be integrated. All image data is automatically displayed in tables and can be immediately turned into diagrams or histograms. Discover offers the tools required for data analysis and process documentation. Objects in the image can be calibrated and the measurement process is then carried out. Quantitative results can be achieved quickly and effectively. Images can subsequently be downloaded to a laptop computer.

The software is ideally used to analyse:

- size of the solder ball
- standoff height
- misplaced and misaligned devices
- crack length

SOLVIEW STANDARD SET - LATERAL PROBE	ACCESSORIES
Lateral viewing probe and backlight illuminator	Olympus OmniStage
2 x AA batteries	Probe rest
Case and inserts	AK2 range of viewing and CCTV adaptors
	C-mount adaptors

SOLVIEW STANDARD SET - DIRECT PROBE	ACCESSORIES
Direct viewing probe	Olympus OmniStage
2 x AA batteries	Probe rest
Case and inserts	AK2 range of viewing and CCTV adaptors
	C-mount adaptors

OLYMPUS OMNISTAGE STANDARD SET	
Olympus OmniStage	Eyepiece adaptor
12 PCB mounts	Digital camera adaptor
Earth bonding lead and foot	C-mount adaptor
Counterbalanced weight set	

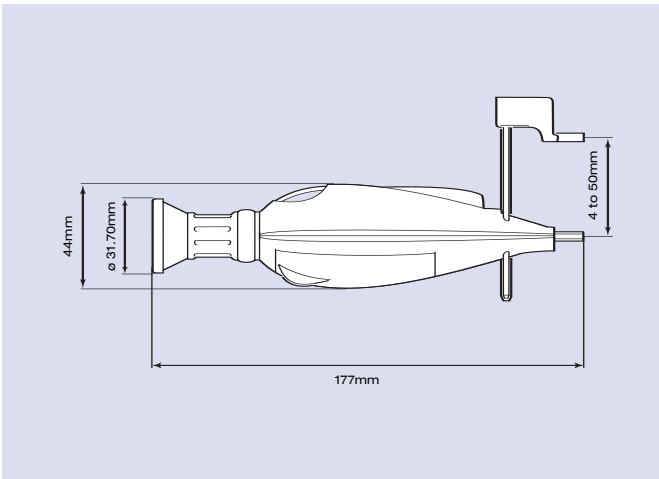
## SolView-00/SolView-90 Specifications

		SOLVIEW-00	SOLVIEW-90
Optical	Field of view	45°	
	View orientation	Corrected	
	Direction of view	0° Direct	90° Lateral
	Pupil height from PCB	0.3mm maximum	
	Focusing	Variable with dioptre accommodation (0 to -4)	
	Working range	0.5mm to infinity	
Illumination	Type	Light emitting diode	
	Colour	White	
Electrical	Battery type	2 x Size LR6 (AA)	
	Voltage	1.2 to 1.5V DC per cell	
	Power	0.57 watts	
	Current	190mA @ 3V DC	
	Run time	> 8 hours	
Mechanical	Backlight span range		4mm min to 50mm max
	Backlight tip dimension		4mm x 1.6mm
	SolView tip length	11.5mm	
	SolView tip dimension	6.05mm x 1.65mm max	4.65mm x 1.65mm max
	Weight	< 0.25kg	
	Eyepiece	32mm ø	
Temperature	Storage	-40°C to +50°C	
	Operational	+10°C to +40°C	
	Relative humidity	65% @ 40°C non-condensing	
Resistance to chemicals	Probe and all external components (including backlight) are resistant to wiping with: water, 5% saline solution, 100% isopropyl alcohol, solder paste (wet) and flux residue		

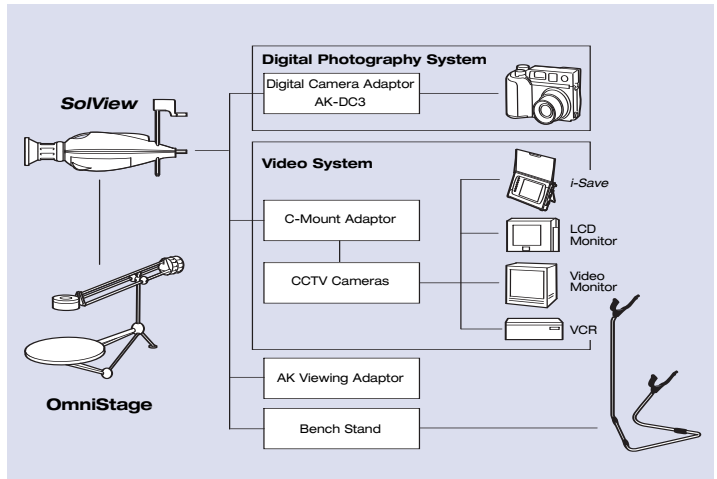
## Olympus OmniStage Specification

OLYMPUS OMNISTAGE	
PCB capacity	Accommodates PCB sizes up to 300mm x 300mm
Axes of movement of platform	Omni-directional
Probe body rotation when mounted to stage	360°
Weight	17kg
Temperature & Resistance to chemicals	As SolView

## SolView-00/SolView-90 Dimensions



## SolView System Diagram



OLYMPUS INDUSTRIAL

**OLYMPUS**<sup>®</sup>

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