VISCOM
vision technology

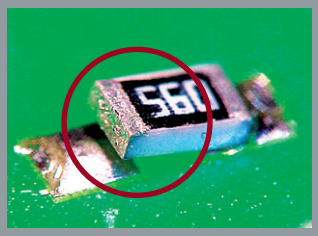
S6056

Extremely Fast and Precise –
High-End AOI and High-End 3D AOI

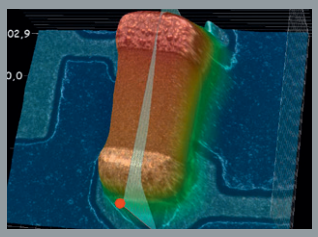
3D AOI

The Future Proof Inspection Solution

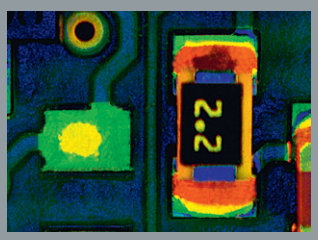
Faster ...
Optical inspection with high performance camera



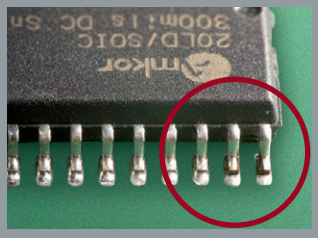
Chip tombstoning



Tombstone in 3D view



Reliable classification and simple verification through color illumination



SOIC lifted lead

Scaleable, modular XM camera technology, including 3D function

Highest inspection depth: 03015 components

Single track or dual track operation

High performance OCR software

Rapid programming with vVision/EasyPro

Auxiliary modules: verification, off-line programming and SPC evaluation

Worldwide competent service: on site, hotline and remote support

Fast, flexible handling

Customer support area on the Viscom website

In the manufacturing of electronic assemblies, optimization of the production processes is a major factor in the success of producing to the high demands of quality and delivery. It is here that the flexibility and performance of an automatic optical inspection (AOI) plays a crucial role. Simplicity of programming for quick product change-over, maximum inspection depth, camera technology capable of dealing with unique components, and high throughput rates that keeps pace with demanding cycle times.

Precision …
Superior inspection results with proven high performance XM 3D camera technology

With the XM technology, Viscom has taken another **major step in the development of camera technology**. With an image capture rate of up to 1.8 gigabits/sec, the new XM module is one of the **fastest AOI camera systems** on the market. The XM module is a completely proprietary development from Viscom and combines **30 years of experience** in inspection technology.

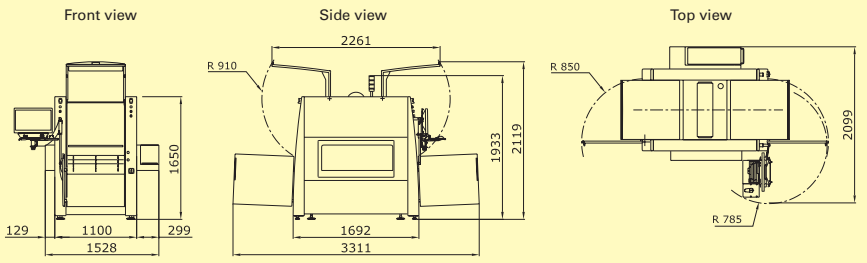
The scalable modular camera technology and the four-color illumination from all spatial directions provide **optimum contrast** values for many types of defects during feature value extraction. As a result, the S6056 inspection system is best equipped for special inspection tasks such as character recognition, polarity marks or colored components. To reliably inspect even the smallest components, the **OnDemandHR function** can be used to switch the optical resolution from 16 to 8 µm (turning it into a high-resolution version).

Additionally, the XM module includes Viscom's standard **angled view inspection**. Thus, critical defects such as lifted leads in the fine-pitch area are reliably detected. Many features such as extended use of the angled view, acquisition of additional images for the verification station and increased illumination are nearly **cycle time-neutral**. This increases both inspection depth and **first pass yield**.

The optional fringe projector in **3D mode** allows up to nine image views to be evaluated from various angles, performing **3D analyses in the entire field of view**. This provides **a more precise evaluation**, particularly for features such as lifted lead inspection, chip inspection and IC coplanarity inspection.

Technical Specifications

	S6056 ST1W	S6056 DS1W
Transport system	Single track	Dual track
Inspection concept	Single inspection	Single inspection
Application		
	Solder joint, assembly, solder paste	
Camera technology		
XM 3D camera technology		
Range	Up to 30 mm (1.2")	
Z-resolution	0.5 µm	
XM module – angled view cameras		
Resolution	16 µm (standard)	
Number of megapixel cameras	4/8 (optional)	
XM module – orthogonal camera		
Field of view	40 mm x 40 mm (1.57" x 1.57")	
Resolution	16 µm (standard), 8 µm (high) switchable with OnDemandHR	
Number of megapixel cameras	1	
XMplus/8M camera technology (optional)		
Software		
User interface	Viscom vVision/EasyPro	Viscom EasyPro/vVision-ready
Verification station	Viscom vVerify/HARAN	Viscom HARAN
SPC	Viscom SPC (statistical process control), open interface (optional)	
Remote diagnosis	Viscom SRC (optional)	
Off-line programming	Viscom PST34 (external programming station) (optional)	
System computer		
Operating system	Windows®	
Processor	Intel® Core™ i7	
PCB handling		
PCB dimensions (L x W)	457 mm x 356 mm (17.9" x 14.0") (specification of the DS1W version, other sizes optional)	
PCB carrier	1 - 5 mm (0.04" - 0.2") (lower thicknesses optional)	
Transport height	850 - 960 mm ± 20 mm (33.5" - 37.8" ± 0.8")	
Width adjustment	Automatic	
PCB clamping	Pneumatic	
PCB contact area	3 mm (0.1")	
Upper transport clearance	50 mm (1.9")	
Lower transport clearance	40 mm (1.6") (other heights on request)	
Inspection speed		
	Up to 65 cm²/s, minimized handling time	
Other system data		
Positioning/handling unit	Synchronous linear motors	
Interfaces	SMEMA, SV70, customer specific	
Power requirements	400 V (other voltages on request), 3P/N/PE, 8 A	
System dimensions	1528 mm x 1650 mm x 1692 mm (60.2" x 65.0" x 66.7") (W x H x D)	
Weight max.	1700 kg (3747 lbs)	



Dimensions in mm

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