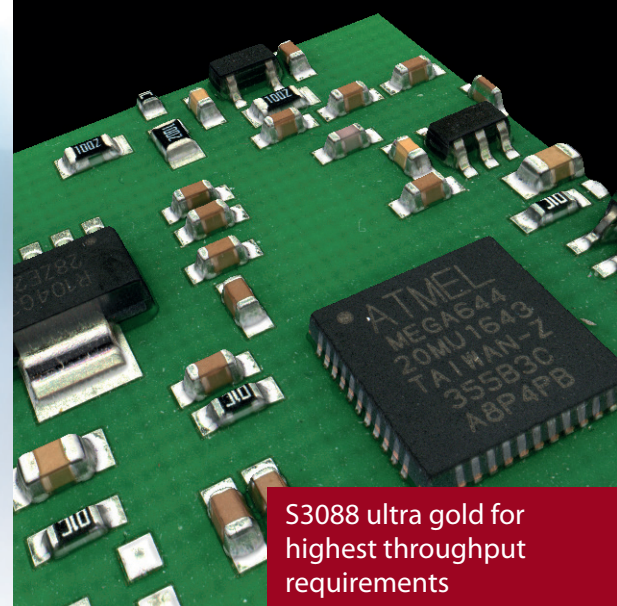




Outstanding
Precision Combined
with Unique
3D Performance

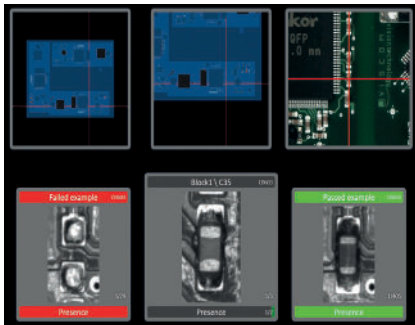


S3088 ultra gold for
highest throughput
requirements

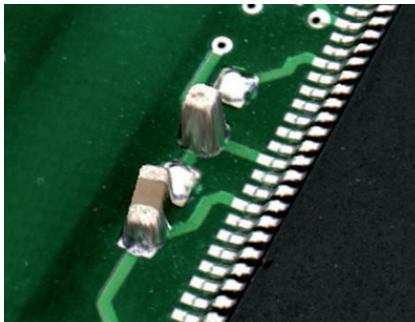
S3088 ultra

High-Speed 3D AOI for the Most Reliable Assembly
Inspection – Economical and Versatile

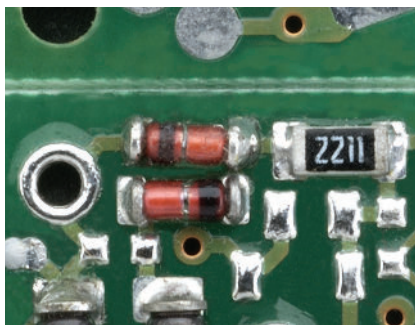
State-of-the-Art 3D Inspection with Innovative Camera Technology



Clear overview at the verification station vVerify



Tombstone in 3D view



Wrong polarity



Lifted Lead, angled view

Fast, precise, and virtually shadow-free 3D analyses with high-performance sensor technology for rapid throughputs

Unique analysis of QFN, DFN, and QFP dewetting using angled views

Resolution of up to 8 μm – reliable 03015 inspection

Simple operation, fast inspection program generation

Confirmed zero defect escape thanks to Integrated Verification

Viscom FastFlow Handling – PCB change in up to 2.5 s

Powerful add-on modules: verification, off-line programming, and SPC evaluation

Worldwide, competent service on-site, by hotline, remote maintenance, and customer support area on the Viscom website

In today's electronics manufacturing environment, reliable and economical quality assurance is demanded. AOI systems must be adaptable to a wide variety of requirements. In addition, the operation must be simple and intuitive while the inspection depth is first-class, reliably covering the most up-to-date component generations in compliance with IPC standards. All of this is combined in the S3088 ultra – and much more: The performance is further increased with the camera module XMplus in the S3088 ultra gold model. The ideal relation of high throughput and high resolution achieved in this system has yet to find its equal. Combination with intelligent software add-ons and the Viscom Quality Uplink results in the optimal solution for electronics assembly and process control.



From Viscom's large product portfolio: S3088 ultra gold (standard 3D AOI), S3016 ultra (3D AOI for PCB undersides), and iX7059 PCB Inspection (3D AXI)

Versatile configuration possibilities with latest high-performance sensor technology for a first class throughput

The S3088 ultra combines the flexibility of the Viscom S3088 AOI family with the overall convincing strengths of the high-performance camera modules XM and XM-plus. Their sensor technology makes very fast inspections possible, both for **high-resolution views** as well as for **color 3D analyses**. The image data rate achieves up to **7.2 gigapixels per second**.

The **high-performance 3D sensor technology** works with an integrated **structured light projector**. This unique solution provides the possibility to use up to 9 cameras. This guarantees **virtually shadow-free 3D inspection** and is the only way to uniformly inspect the same component types on an electronics assembly.

In addition to the orthogonal image acquisition, Viscom uses **angled camera views**. This requires technically fully-developed solutions, as for example **maximum sharpness over the entire field of view**. This is the only way to reliably detect dewetting on QFPs and typical defects on QFNs and DFNs. Other 3D solutions and pure orthogonal inspections fail here.

With a field of view of 50 mm x 50 mm and an inspection speed of up to 65 cm²/s, the 3088 ultra gold model has been designed to satisfy highest throughput demands.

Every S3088 ultra can be operated through the user software EasyPro and using vVision. This guarantees **intuitive control** and **simple inspection program generation**. In connection with intelligent Viscom software add-ons such as **Extended Lifted Lead Detection**, **Integrated Verification** or **Viscom Quality Uplink**, the full potential of the AOI system can be completely utilized.

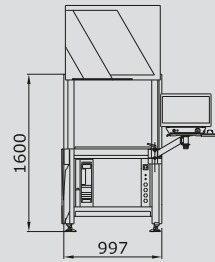
A further highlight is the **Viscom FastFlow Handling**. The high-speed transport facilitates interference-free and extremely high throughput, thanks to the synchronous input and output of assemblies, with a transfer time of as little as 2.5 seconds. Together with the high-speed 3D sensor technology, **extreme cycle time requirements** are met exceptionally well.

As a central feature, the **integrated defect verification** simplifies the reduction of pseudo defects and offers a convenient tool to ensure a zero defect escape strategy. Thus, the quality of the inspection programs can be confirmed quickly and easily at any time, whether for in-house production needs or documentation during customer audits. If Viscom SPI/AXI/MXI are used in addition to Viscom AOI, the Quality Uplink provides a unique tool to **link all inspection results**. This avoids wrong defect classifications, facilitates optimization of product-specific inspection strategies and provides an **effective process control mechanism**. Powerful add-on modules like **verification**, **off-line programming** and **SPC evaluation** round out the offer.

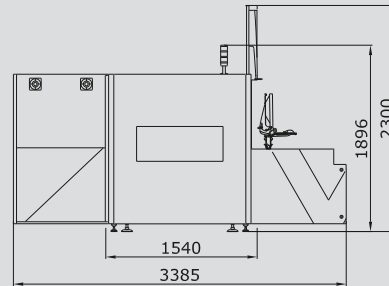
Technical Specifications



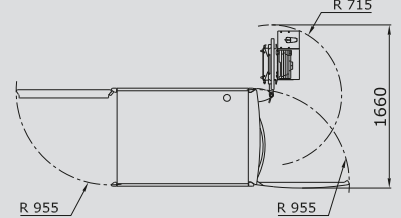
Front view



Side view



Top view



Dimensions in mm

		S3088 ultra	S3088 ultra gold
Inspection scope		Solder joints, placement, solder paste	
Camera technology		XM	XMplus
	Total number of megapixels	Up to 65	Up to 121
	3D sensor technology		
	Z-resolution	0.5 µm	
	Z-range	Up to 30 mm (1.2")	
	Angled view cameras		
	Number of cameras	4 (8, optional)	8
	Orthogonal camera		
	Resolution	8 µm	10 µm
	Field of view	40 mm x 40 mm (1.6" x 1.6")	50 mm x 50 mm (2" x 2")
Inspection speed		Up to 50 cm ² /s	Up to 65 cm ² /s
Software	User interface	Viscom vVision/EasyPro	
	Statistical process control	Viscom vSPC/SPC, open interface (optional)	
	Verification station	Viscom vVerify/HARAN	
	Remote diagnosis	Viscom SRC (optional)	
	Programming station	Viscom PST34 (optional)	
System computer	Operating system	Windows®	
	Processor	Intel®Core™i7	
PCB Handling	PCB dimensions	508 mm x 508 mm (20" x 20")	
	PCB support	Optional	
	Transport height	850 - 950 mm ± 20 mm (33.5" - 37.4" ± 0.8")	
	Width adjustment	Automatic	
	Transport concept	Single track transport	
	PCB clamping	Pneumatic	
	Upper transport clearance	50 mm (2")	
	Lower transport clearance	45 mm (1.8"), up to 85 mm (3.3") optional; 40 mm (1.6") with PCB support	
Other system data	Positioning/handling unit	Synchronous linear motors	
	Interfaces	SNEMA, SV70	
	Power requirements	400 V (other voltages on request), 3P/N/PE, 8 A, 4 - 6 bar working pressure	
	System dimensions	997 mm x 1600 mm x 1540 mm (39.3" x 63" x 60.6") (W x H x D)	
	Weight	Max. 800 kg (1764 lbs)	

Our international subsidiaries and representatives can be found at:

www.viscom.com