

## S3088 CCI

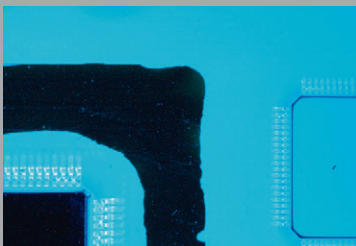
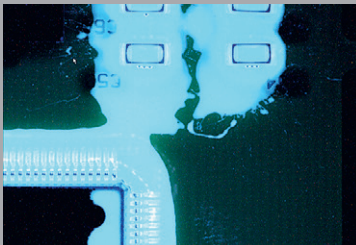
**Precise detection  
of coating voids**

**Fast inspection  
program creation**

**Easily adaptable to vari-  
ous conformal coatings**

**Upper transport  
clearance up to 105 mm**

**3D Spot Measurement**



### Reliable conformal coating inspection – powerful and precise

Conformal coating protects electronics assemblies against damage from moisture and wetness. The S3088 CCI system from Viscom is tailor-made to meet the requirements of conformal coating inspection. Special UV LEDs and other features ensure the right contrast with the UC-sensitive conformal coating. In addition to the orthogonal cameras, the S3088 CCI can also be equipped with 4 or 8 optional angled cameras. With an orthogonal resolution of 10.5  $\mu\text{m}/\text{pixel}$  or 8  $\mu\text{m}/\text{pixel}$  angular, typical defects such as cracks, coating voids, too-thin or too-thick coatings, paste smearing, contamination and splashes can be detected quickly and reliably.

The camera technology works with the Viscom SI inspection software vVision or EasyPro, thus offering the same user interface and programming strategies as other AOI systems in the successful S3088 family. As a result, traceability concepts, special inspections such as reading data matrix code (DMC) and other production-relevant features can be implemented without any problems. Thanks to flexible algorithms, the S3088 CCI can be adapted very quickly to different conformal coatings. Simple inspection programs can be created in just a few minutes. Optional coating layer thickness measurements (3D Spot Measurement) and inspection of wet coatings, plasma and other nano coatings are also possible.

**AOI**

# Technical Specifications

## S3088 CCI

### Inspection scope

Cracks, defect locations, completeness, paste smearing, splashes  
 Dry coating inspection, nano coating inspection (optional)

### Camera technology

8M module – orthogonal cameras (white and UV LEDs)	HighDensity module	
Field of view	57.6 mm x 43.5 mm (2.3" x 1.7")	20 mm x 20 mm (0.8" x 0.8")
Resolution	Up to 11.75 $\mu$ m	12.75 $\mu$ m
Number of megapixel cameras	4	1

8M module – angled cameras (UV LEDs) (optional)		
Resolution	Up to 8 $\mu$ m	-
Number of megapixel cameras	4 (8 optional)	-

### 3D Spot Measurement

Vertical range	0 - 15 mm z-axis (0 - 0.6")
Inspection range	30 - 500 $\mu$ m (other values optional)*
Resolution	250 nm
Field of view (diameter)	20 $\mu$ m
Height evaluation	< 2 $\mu$ m @ 3 $\sigma$ on certification target
repeatability	< 5 $\mu$ m @ 3 $\sigma$ on coating (100 $\mu$ m acrylic resin sample)*

### Software

User interface	Viscom vVision/EasyPro
SPC	Viscom SPC (statistical process control), open interface (optional)
Verification station	Viscom vVerify/HARAN
Remote diagnosis	Viscom SRC (software remote control) (optional)
Programming station	Viscom PST34 (optional)

### System computer

Operating system	Windows®
Processor	Intel® Core™ i7

### PCB handling

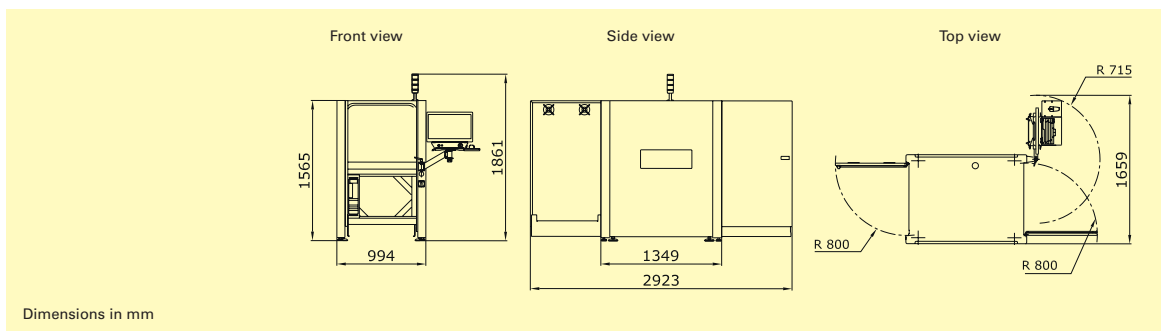
PCB dimensions	508 mm x 508 mm (20" x 20")
Transport height	900 - 950 mm $\pm$ 20 mm (35.4" - 37.4" $\pm$ 0.8")
Width adjustment	Automatic
Transport concept	Single track transport
PCB clamping	Pneumatic
Upper transport clearance	50 mm (2") (105 mm optional) (4.1")   50 mm (2")
Lower transport clearance	Up to 60 mm (2.4")

### Inspection speed

Conformal coating inspection	20 - 40 cm <sup>2</sup> /s*
Layer thickness measurement	0.6 s per FOV*

### Other system data

Positioning/handling unit	Synchronous linear motors
Interfaces	SMEMA
Power requirements	230 V (other voltages on request), 1P/N/PE, 10 A, 4 - 6 bar working pressure
System dimensions	994 mm x 1565 mm x 1349 mm (39.1" x 61.6" x 53.1") (W x H x D)
Weight	600 kg (1323 lbs)



#### Headquarters:

**Viscom AG**  
 Carl-Buderus-Straße 9 - 15 · 30455 Hanover  
 Tel.: +49 511 94996-0 · Fax: +49 511 94996-900  
 info@viscom.de · www.viscom.com

You will find our international subsidiaries and representatives in Europe, the USA and Asia under

[www.viscom.com](http://www.viscom.com)

\*Specifications may vary by coating material – please do not hesitate to contact us for individual evaluations.  
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