

S3088AV

The Compact System
for the Automatic Optical Inspection
of Printed-Circuit Boards

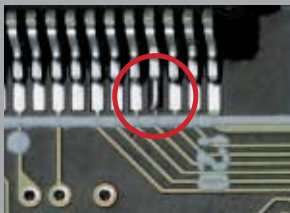


AOI

Printed-Circuit Board Inspection

Easy Program Creation Reliable and Rigorous Inspection

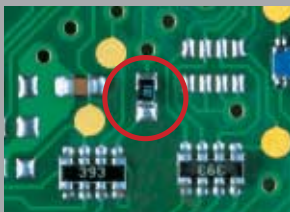
Scope of inspection:



Solder joints:
e.g. QFP co-planarity



Paste printing:
e.g. Smeared paste print



Solder fault:
e.g. Chip tombstoning



Assembly:
e.g. Diode polarity

**Rugged standard
sensor technology**

High resolution

**Lead-free and
standard assemblies**

**Rapid program creation
using EasyPro**

Algorithm-based inspection

Simple program transfer

**Additional modules:
Repair and re-classification
Off-line programming and
SPC evaluation**

**World-wide competent service locally,
via hotline or remote diagnostics,
with Internet support**

Development in the field of electronics manufacturing is characterized by increasing miniaturisation and growing demands on quality and throughput rates. In the quest for suitable yield management concepts, automatic optical inspection (AOI) has emerged as a necessary pre-requisite to the demand for zero-defect production. It not only guarantees rapid and reliable inspection of assemblies after reflow, paste printing and component placement, it also permits concurrent overall process management in production.

S3088AV

Cost-optimized inspection

Full inspection depth

Attractive price-performance ratio

The S3088AV is a cost-optimized basis system with **full reflow inspection** scope. The inspection of the printed-circuit boards is carried out in single-track operation mode and permits the inspection of assemblies up to approximately 400 x 350 mm (15,7" x 13,8") in size. The system is fully program compatible with the S6055 series.

The S3088AV is equipped with the high-performance **4M (Megapixel) sensor technology**. In addition, the use of angled camera modules ensures full-depth inspection, which also assures zero-defect strategy.

The **EasyPro user-interface** guarantees high operator comfort. Program creation and optimization can be carried out easily and quickly using this software. Functions, such as auto-optimization, integrated error-escape verification and SPC-based optimization are major components of EasyPro and support the hassle-free set-up of new products.

Subsequent data evaluation combined with Viscom re-classification, SPC and EasyPro result in a powerful tool for **real-time process management**.

All Viscom systems are **100% lead-free solder compatible**, the algorithm-based evaluation produces optimum results even at greatly varying contrast levels.

Customer care and service via world-wide on-site service, remote diagnostics and hotline provide individual and efficient support. In addition to this, our Internet customer forum offers free inspection pattern downloads and up-to-the minute information.



EasyPro – AOI operation made easy

Selected data sources

Currently active, selected components

Intuitive operation

Auto-optimization for validated results

Integrated verification through the real-faults stored by the rework station

Technical Specifications

S3088AV

Application

Post reflow or wave soldering

Camera technology

Orthogonal camera module

Field of view	2752 x 1024 or 2752 x 2048 pixels (optional)
Number of megapixel cameras	2 or 4 (optional)
Pixel size	22 µm, 10 µm (optional)

Angled-view camera module

Field of view	4 x 672 x 512 pixels
Number of cameras	4
Pixel size	15 µm

Software

User-interface	Viscom EasyPro
SPC	Viscom SPC package, open interface (optional)
Rework station	Viscom HARAN rework solution
Remote diagnostics	Viscom SRC (optional)
Programming station	Viscom PST34 (optional)

Analysis computer

Operating system	Windows 2000®
Processor	Intel PENTIUM® processor technology

PCB handling

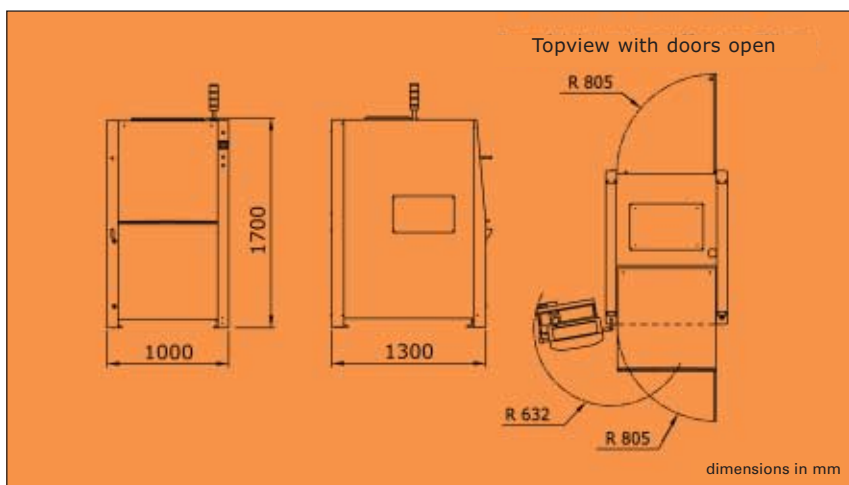
PCB dimensions	400 x 350 mm (15,7" x 13,8") (L x W)
PCB carrier	(optional)
Transport height	850 to 960 mm ± 20 mm
Width adjustment	Automatically with set-up
Handling unit	Gantry system with synchro-linear motors
Transport concept	Single-track transport
PCB clamping	Pneumatic during inspection
PCB edge clearance	3 mm
Upper clearance	35 mm (1,38")
Lower clearance	50 mm (1,97")

Inspection speed

Typically 10 - 20 cm²/s

Other system data

Interfaces	SMEMA, SV70, customer specific
Power requirements	400 V 50/60 Hz, usage < 3 kW, 6 bar compressed air
System dimensions	1000 x 1300 x 1700 mm (39,3" x 51,1" x 66,9") (W x D x H)
Weight	Max. 1050 kg (2314 lbs)



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