

LaserVision Twin

SYSTEM VERSIONS

LaserVision 6 Twin

Inline-System, for testing both sides of double-sided PCBs at the same time, equipped with 1 color sensor module on each side in GigE Vision technology and telecentric lenses, lighting unit consisting of 9 independently programmable modules (top + 8 sides) on the top and bottom side, transport system, indicator lights and SMEMA interface

SYSTEM COMPONENTS, HARDWARE

Image Processing Computer

- | 2 x 19" Rack PC with Microsoft Windows OS
- | LCD monitor

XY-Positioning Unit

- | Working area (over 2 stop positions): 550 x 450 mm

Orthogonal Sensor Modul with Mega Pixel Technology

Resolution	Sensor/Pixel	Field of Vision/mm	Component size
55,3 µm (THT)	1024 x 768	56,63 x 42,47	THT < 65 mm high
15,7 µm (SMD)	2048 x 2048	32,15 x 32,15	pitch 0.4 0402
9,3 µm (FINE)	2048 x 2048(4M)	17,60 x 17,60	pitch 0.3 01005

Option Angled-view Module

Four lateral cameras in addition to the main camera integrable into the lighting on top and bottom side

Option Height Measurement by Laser Triangulation

only integrable on top side
 | Laser: safty class 2; red 675 nm
 | Working area: 0...70 mm accuracy 0,2 mm
 (Accuracy depending on test surface reflection)

Vertical Clearance

- | Top: 65 mm
- | Bottom: 55 mm

Test Speed

- | Depending on board design and configuration:
 Typ. 300.000 components/h

General Data

- | Power supply 230V / 3A o. 110V / 6A
- | Certificat CE (EU-standarts, Machine directive incl. EMC etc.)
- | Dimensions in mm 1550 x 1000 x 1290 (H x W x D)
- | Weight (Stand-alone/Inline) ca. 570 kg
- | Operating temperature 10°C to 35°C
- | Operating humidity < 80 %, non-condensing
- | Inline-System
- | Compressed air 4 bar
- | Assembly line height 840 mm +/- 25 mm
 890 mm +/- 25 mm
 940 mm +/- 25 mm
 (other heights possible)

Communication with assembly line via SMEMA interface

SOFTWARE

Standard Routines for Image Processing

- | Component angel 0 – 360° supported
- | Presence and polarity verification on all THT and SMD components
- | Measurement of component position (offset, angle)
- | Solder joint inspection on SMD and THT components
- | Solder joint inspection on ICs
- | Short-circuit tests (solder bridges)
- | Solder paste inspection (2-D)
- | Initial sample test

Options

- | Offline programming, remote station
- | Recirculation of PCBs
- | Further licenses for LVRepair, LVBoard, LVStat
- | Monitor arm
- | Keyboard for repair station aid

Production Tools, Documentation

- | Automatic storage of test results
- | Barcodes readable with camera
- | User definable result messages
- | CAD data conversion tool, license for LVCad
- | Fault statistic, yield-meter, SPC (LVStat)
- | Graphical repair station (LVRepair)
- | Graphical board view (LVBoard)
- | OCV-Software-Modul (optical character verification) - (also for laser engraved components)

