

LaserVision Compact

SYSTEM VERSIONS

LaserVision Compact 4

Tabletop-System equipped with color sensor module with GigE Vision technology, telecentric lens, drawer with adapter for PCBs as well as a lighting unit consisting of 10 independently programmable modules (Top + 8 sides + coaxial), rotatable unit of measurement, with 4 cameras that enables a 360° panorama view on all components

SYSTEM COMPONENTS, HARDWARE

Image processing computer

- | 19" Rack PC with Microsoft Windows operating system
- | LCD-Monitor

XY-positioning unit

- | Working area 500 x 400 mm

PCB height

- | Top: max. 45 mm
- | Bottom: max. 40 mm

Orthogonal sensor module with megapixel technology

Resolution	Sensor/pixel	Field of vision/mm	Component size
17,5 µm	1624 x 1230	28,0 x 21,5	pitch 0.4 0402
10.0 µm	1624 x 1230	14,8 x 11,4	pitch 0.35 01005

Inspection speed

- | Depending on board design and configuration:
- Typ. 140.000 components/h

General data

- | Power supply 230 V/3A
- | Certificat CE (EU-standarts, Machinery Directive incl. EMC etc.)
- | Dimensions in mm 866 x 920 x 580 (W x D x H)
- | Weight Approx. 80 kg
- | Operating temperature 10°C to 35°C
- | Operating humidity < 80%, none-condensing



SOFTWARE

Standard routines for image processing

- | Component angle 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, including THT
- | Short-circuit tests (solder bridges)
- | Solder paste inspection (2-D)
- | Initial sample test

Production tools, documentation

- | Automatic storage of test results
- | Barcodes readable with camera
- | User definable result messages
- | CAD data conversion (LVCad)
- | Data logging of test results, flexible output (ASCII) format, transfer to an external QMS
- | Fault statistic, yield-meter, SPC (LVStat)
- | Graphical repair station (LVRepair)
- | Graphical board view (LVBoard)
- | Offline serial debugging
- | Remote service / debugging via internet
- | Optical character verification (OCV)

Options

- | Offline programming, remote station
- | License for LVRepair, LVBoard, LVStat
- | Angled-view module: four lateral cameras in addition to the main camera integrated into the lighting
- | Rotatable unit of measurement, with 4 cameras that enables a 360° panorama view on all components

Program generation

- | Automatic program generation from CAD data
- | Wizzard (guided program generation)
- | Automatic changemanagement of board revisions
- | Automatic camera and test route optimisation
- | Automatic generation of multi panel board inspection
- | Array test for easy reproduction of similar individual routines
- | Automatic generation of programs for first off (comparison with golden board)
- | Inspection alternatives for component versions
- | Support of insertion variants (up to 255)
- | Inverting of test results of not assembled components
- | Output of user-definable Pass/FAIL messages

Supported by:



on the basis of a decision by the German Bundestag