

LVCOMPACT

SYSTEM VERSIONS

Standalone-System, LVCompact

equipped with color sensor module with GigE Vision technology, telecentric lens, drawer with adapter for PCBs as well as a lighting unit consisting of 5 independently programmable modules (Top + 4 sides)

SYSTEM COMPONENTS, HARDWARE

Image processing computer in the system

| SIMATIC Box PC with Microsoft Windows operating system
| LCD-Monitor

XY-positioning unit

| Working area 450 x 350 mm

PCB height

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

Orthogonal sensor module with megapixel technology

Resolution	Sensor/pixel	Field of vision/mm	Component size
18,7µm	1390x1038	26,0 x 19,4	pitch 0.4 0402
10µm	1392x1038	13,9 x 10,4	pitch 0.35 0201

Inspection speed:

Depending on board design and configuration: Typ.100.000components/h

General data

Power supply	230 V/3A
Certificat	CE (EU-standarts, machine-directives incl. EMC etc.)
Dimensions in mm	850 x 920 x 440 (W x D x H)
Weight	Approx. 100kg
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
- | CAD data conversion tool, license for LVCAD
- | User definable result messages
- | 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
- | Communication with production line over various interfaces
- | Barcodes readable with camera
- | Optical character verification (OCV) on components

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, max. PCB height reduced to 40 mm.

Program generation

- | Automatic program generation from CAD data
- | CAD-Overlay, 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