

LVCOMPACT TWIN

SYSTEM VERSIONS

Standalone-System, LVCompact^{TWIN} for testing both sides of double-sided PCBs at the same time

equipped with color sensor module with GigE Vision technology, a telecentric lens, automatic drawer with adapter for PCBs as well as lighting units consisting of 5 independently programmable modules (Top + 4 sides) on the top and bottom side

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

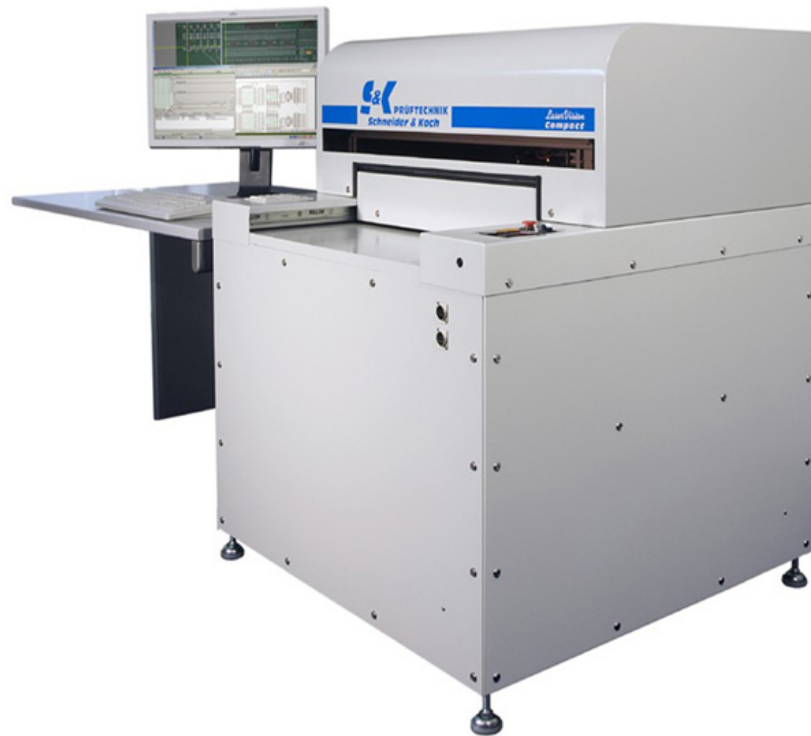
Resolution	Sensor/pixel	Fieldof vision/mm	Component size
18,7µm	1390x1038	26,0 x 19,4	pitch 0.4 0402
10µm	1392x1038	13,9 x 10,4	pitch 0.35 0201

Inspection speed:

Depending on board design and configuration:
Typ. 200.000 components/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 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, 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