

## LVCOMPACT TWIN

### SYSTEM VERSIONS

#### Standalone-System, LVCompact<sup>TWIN</sup> 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 350 x 450 mm

#### PCB height

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

#### Orthogonal sensor module with megapixel technology

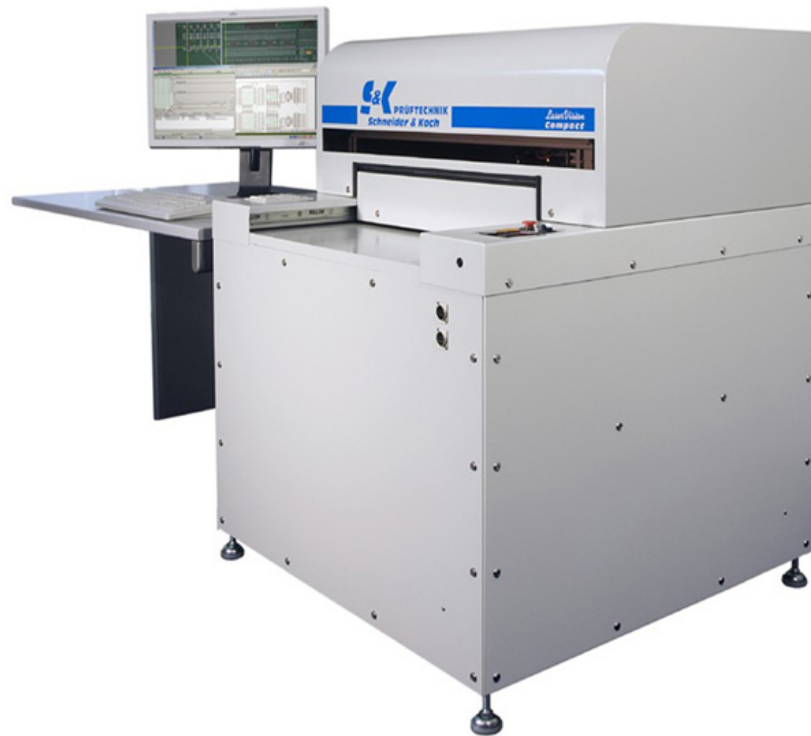
Resolution	Sensor/pixel	Fieldof vision/mm	Component size
18,7µm	1390x1038	26,0 x 19,4	pitch 0.4 0402
10µm	1392x1038	13,9 x 10,4	pitch 0.35 0201

#### 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

#### 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