

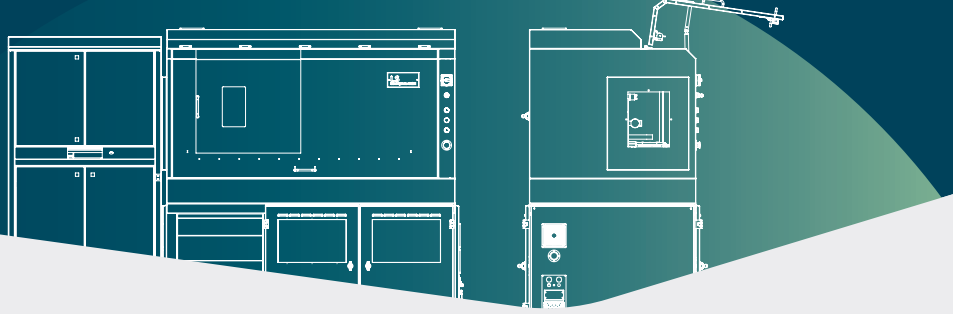
Laser Trim System for the Electronics Industry



LS 9600 TD

Customized Trim

Laser Trim System for adjusting Thin- and Thick Film, as well as hybrid- and SMD circuits by active and passive trimming of resistors, capacitors and inductivities.



Customized Trim LS 9600 TD

Specifications

Laser Sources*

- Wavelength | 532 or 1064 nm
- Pulse length | ns and ps
- Average power | Up to 6W
- Pulse energy attenuation | 0 – 100 %
- Spot sizes (cut width) | 10 – 40 µm

Motion System*

- X/Y Stage with linear motors
 - Travel range up to 330 x 630 mm
 - e.g. Ceramics substrate of up to 6" x 8"
 - e.g. FR4 customizable
 - Resolution | 1 µm
 - Acceleration | 5 m/s²
- Motorized theta axis
 - Up to | ± 90°
 - Resolution | 0.001°
- Motorized or manual z-axis
- Motorized z-axis for probe unit

Vision System*

- GigE CMOS Camera
- Edge Detection, Area Search, Model Finder
- Illumination
 - Grazing incidence
 - Coaxial
- In-situ setup

Software*

- HTML front pages for easy operation
- LabView environment for program generation and measurement features
- LS-MaTriCS for laser source & galvanometer control
- WIN 10 based

Measurement System*

- Active and passive trimming
- Active Guarding
- Source Measurement Unit (SMU)
 - max. 60V/ 0.5 A
 - 100 fA, 100 nV resolution
 - Up to 1.8 MS/s
- Digital Multimeter (DMM)
 - Max. 300V / 1A
 - min. 10 µH, 300 pF
 - Up to 1.8 MS/s
- Switch Matrix
 - Free selection of Force & Sense
 - Up to 138 x 8 slots @ up to 1A

Probe Cards*

- LS Probe Card (40 pins), or
- Accuprobe SK65 (48, 70, 100 pins), or
- Customized

Trim Cuts*

- P, L, J, D - Cut
- Meander Cut
- Shave Cut (symmetrical)
- Raster Cut

Options*

- Flying Probes
- Hybrid System with probe card and flying probes
- Substrate Height Sensing
- Automation (semi or full)
- Automatic sliding door
- IEEE Bus (GPIB)
- Uninterruptable Power Supply (UPS)
- General system customization

* Depending on application requirements

Benefits

- Cutting geometry U, I, L, D, J, Shave-Cut or Meander-Cut
- Automatic pre-, end- and contact test
- PXIe measurement including switching matrix
- Automatic camera alignment – edge, pattern and structure detection
- Full marking capability – text, barcode, 2D code and graphics
- DC motor driven Probe Assembly
- Sample type: LS or ACCUPROBE type – customer specific
- Flying Probes
- Step and repeat function of linear motor
- Laser power measurement