

# FRV-9800

## Flying Probe System



### A New Generation Platform for Chip - C Resistance Measurements as Quality Assurance Tool

- Advanced vision and motion subsystems to offer dramatically improved positioning and alignment capability
- Capability to measure from milli-ohms(mΩ) to Mega-ohms (MΩ) for 0402/0201/01005 substrates and above
- Built-in pattern recognition for auto compensation & precise alignment
- User friendly GUI software

## FRV 9800 - SPECIFICATIONS

### Motion Control System

| X-axis                | Results |
|-----------------------|---------|
| Linear Accuracy (urn) | 4.1     |
| Repeatability (urn)   | 1.0     |
| Flatness (urn)        | 2.06    |
| Straightness (urn)    | 5.90    |
| Y-axis                | Results |
| Linear Accuracy (urn) | 5.4     |
| Repeatability (urn)   | 1.5     |
| Flatness (urn)        | 7.81    |
| Straightness (urn)    | 4.92    |
| Z1-axis               | Results |
| Linear Accuracy (urn) | 2.6     |
| Repeatability (urn)   | 0.5     |
| Z2-axis               | Results |
| Linear Accuracy (urn) | 2.4     |
| Repeatability (urn)   | 0.3     |

### Measurement System

#### Agilent 34420A Micro-ohm Meter

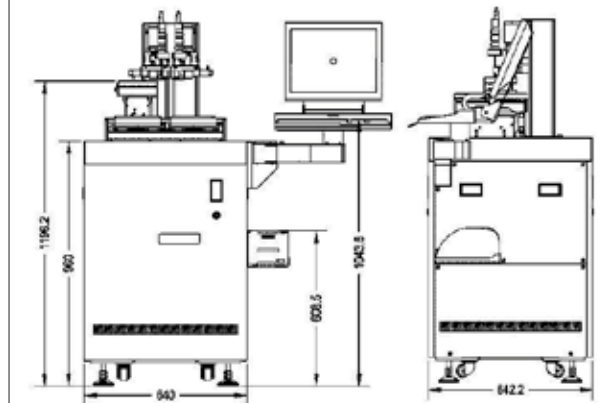
- 7 ½ digit Resolution
- High Sensitivity of 100nΩ
- Resistance Measurement Range up to 1MΩ
- 250 Readings/sec



### Application Software

- Application Software developed in C#, with an easy-to-use interface running in Window XP

### Physical Characteristics



### Utilities Requirements

- **Power:** 220V AC, single phase, 10A (50/60Hz)
- **Air:** 100psi / flow rate 10 cfm
- **Vacuum:** 100 csm for substrates retention

### Vision Control Subsystem

- ½ - inch IT CCD
- 768 x 494 Pixels
- 60db Signal-to-Noise
- 0.3lx Minimum Sensitivity

### Additional Features

- Bar Code Scanner to scan the Substrate Lot / Resistor Type
- Strip Printer to print the measurement Results summary
- Individual Fiducial PR Alignment for 0201/01005 substrate



**LASER TEK** (SINGAPORE) PTE LTD  
雷科(新)私人有限公司

Laser Tek Singapore Pte. Ltd.  
33 Ubi Avenue 3, #02-42/43, Vertex,  
Singapore 408868  
Tel: (65) 6742 8260 Fax (65) 6742 3719  
<http://www.lasertek.com.sg>

**LASER TEK** TAIWAN Co. LTD  
雷科控股有限公司

Laser Tek Taiwan Co., Ltd  
No. 248-12, Shin Sheng Rd., Chien-Zhen District,  
Kaoshiung, Taiwan 806, R.O.C.  
Tel: 886-07-8159877 Fax: 886-07-8156711  
<http://www.lasertek.com.tw>