The **TF-3050 Series 3 LEP70** provides high accuracy performance to overcome the new challenges of smaller geometries of chip resistor trimming. Proprietary designs achieve the high accuracy mechanical positioning and ultra-stable laser beam control demanded by industry. **TF-3050 S3** utilizes vision registration theta rotation within a Windows XP operating system. These advance features are integrated with established substrate handling and automation systems.

### Optical System
- **Beam Positioned:** Precision high-speed galvanometer
- **Field Size:** 12 x 90 mm
- **Resolution:** 1.5 μm
- **Repeatability:** 2.5 μm
- **Spot Size:** 18 - 40 μm (standard 1064nm)
- **Focus Len:** 125 mm flat telecentric type

### Laser System
- **Laser Type:** Diode pumped Q-switched
- **Output Power:** 6 W (Q-Switched Avg. Power @ 10 kHz)
- **Wavelength:** Standard 1064 nm
- **Pulse Width:** Nominal: 70 nsec
- **Power Measurement:** Thermal pickup

### Measurement System
- **Dual Mode:** Force Current & Force Voltage
- **Range:** 0.12 to 30 MΩ
- **Accuracy:** 0.02% Midrange
- **Repeatability:** 0.01% Midrange
- **Resolution:** 0.005%
- **Measurement Time:** 50 μsec
- **Calibration Standards:** 6 pcs 0.01%
- **Guard Drive Current:** 100 mA
- **Guard Offset:** 1 mV

### Switching Matrix
- **Pins per Card:** 16
- **Lines per Pin:** 3 (Force, Sense or Guard)
- **Cards per System:** 6 pcs std, 12 pcs maximum
- **Switch Type:** Dry Reed Relay
- **Contact Life:** 1 Billion Cycles
- **Insulation:** > 10 GΩ
- **Switching Time:** 200 μsec

### Controller
- **Intel Core 2 duo processor for main application**
- **Pentium processor for trim engine**

### Software
- **WinLts 3 Windows XP Application Software**

### Special Features
- **Dimensions:** 1310 mm x 1028 mm x 1800 mm
- **Weight:** 900 kg

### Utilities Requirements
- **Power:** 220 V AC, single phase, 10A (50/60Hz)
- **Air:** 80~100 psi / flow rate 10 cfm
- **Vacuum:** 100 CFM factory vacuum for debris removal and substrates retention