Microprobe Positioning System MPS

Introduction

The Microprobe Positioning Instrument is precision equipment designed for image acquisition at microscopic level. The positioning unit enables the user to position and align the micro-probes at



precise location with several DOFs. The positioning stage is designed to support customizations as per user requirement. The developed system enables optical and electro-optical testing of electronic and photonic components at the microscopic scale. The stability and the robustness of the positioning unit have been rigorously tested to ensure the long-term accuracy and reproducibility of the measurement results. The device also presents an economical alternative to the existing state-of-art systems.

Specifications (Customizable)

- 3 DOF imager
- 5-megapixel high definition camera
- Dual stage probes with 13 mm axis
- 200µm Tungsten probe/electrodes
- Tip diameter 20-micron, imager Z-axis 70 mm
- Least count, resolution: 0.01 mm
- Multi-functional with customizable sample holder
- Software module for image and data acquisition

Applications

- Characterization of biological micro structures.
- Micro inspections of wafer-level electronic and photonic components, I-V characterization.

Status

Custom made for Indian Institute of Nano Science & Technology (INST) Mohali.