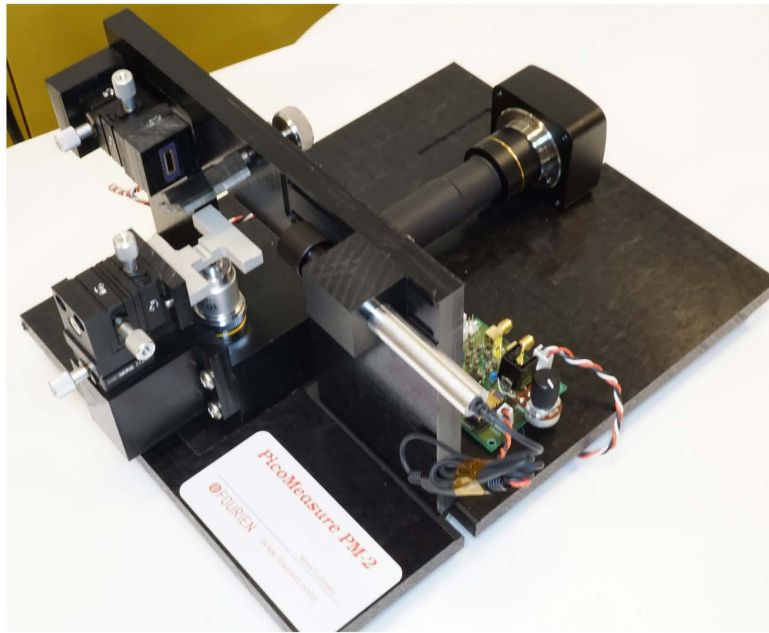


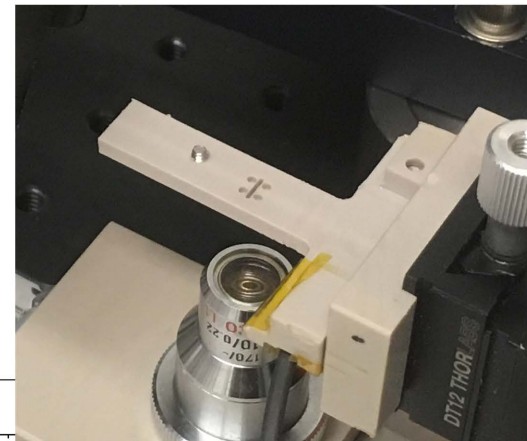
PicoMeasure PM-2 for picoliter measurements



- *Convenient chip installation*
- *Quick sample loading*
- *Optical imaging*
- *Non contact measurement*
- *Resonance frequency and static deflection*
- *Highly customizable construction*

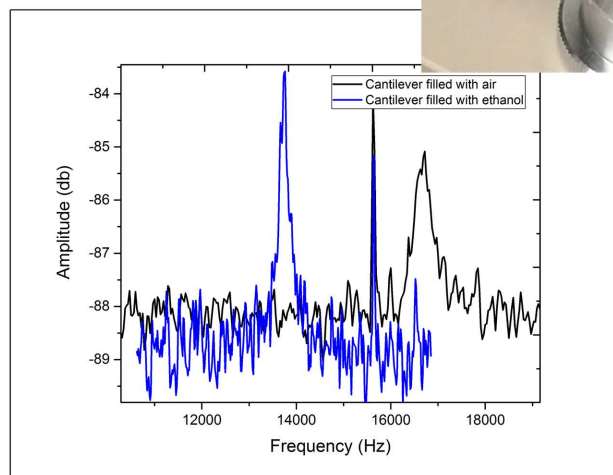
BMC characterization using PicoMeasure PM-2

PM-2 is specifically designed to measure out-of-plane resonance frequency and static deflection of bimaterial microfluidic cantilevers (BMC). The plug-and-play chip holder can be in focus for an on-board microscope as well as measurement laser. The output is provided electrically through a BNC cable.



Position sensitive diode

- **Detector:** Silicon
- **Position nonlinearity:** $0.1 \pm \%$
- **Output:** Analog
- **Active area:** 10mm x 2mm
- **Responsivity at 940nm:** 0.63 A/W
- **Typical capacitance:** 15 pF at 15V
- **Typical rise time:** 0.2 μ S
- **Reverse Bias:**
 - Min: 5V
 - Typ: 15 V
 - Max: 20V



Measurement Laser

- **Wavelength:** 635 nm
- **Focal Length:** 100 mm
- **Focal spot size:** $\sim 50 \mu$ m

Digital Microscope

- **Layout:** Horizontal
- **Magnification:** 10X
- **NA:** 0.25
- **Thread:** RMS
- **Imaging:** USB camera

Electronics

- **BMC actuation:** Piezo actuator
- **Interfacing:** SMA Connector
- **Typical Voltage:** +12 V, -12V
- **Output:** PSD Sum, PSD Deflection