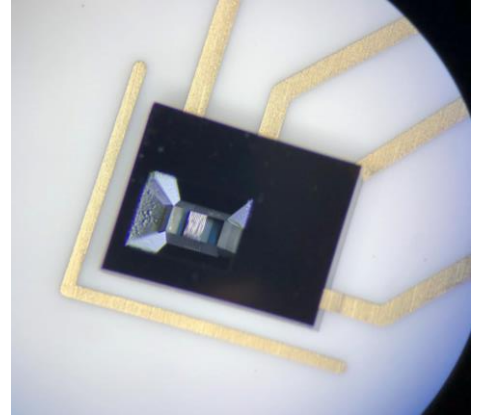


## Technical Overview

The technology described here is an ultra-sensitive, fast response device to measure fluid speed or flowrate. The same device is capable of measuring in either a gas or liquid medium at any viscosity.

The novel sensing mode is enabled through the use of a nanoscale sensing element which exhibit non-linear deformation when exposed to a fluid flow.

The novel platform-based architecture offers very high sensitivity to a wide range of fluids, has excellent chemical compatibility, sterilizability, and is extremely cost efficient.



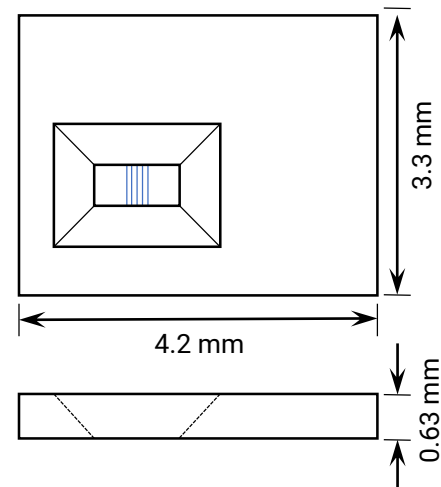
Tendo's silicon-based sensing device, with freestanding sensing elements in the middle

## Benefits

- Sensitive – resolve at very low air/gas/liquid speeds
- Versatile – one sensor configuration can measure a wide range of fluids
- Cost-efficient – silicon based manufacturing reduces unit cost; unit disposable
- Space-saving – miniature size; direct integration to PCB
- Chemical-compatible – superior chemical compatibility for a wide range of liquids

## Sensor Specifications

Die materials	Silicon (Si), Platinum (Pt), conformally coated with Parylene
Die size	4.2 mm x 3.3 mm x 0.63 mm
Response time	< 1 millisecond (ms)
Energy consumption	< 10 microwatt ( $\mu$ W)
Fluid viscosity range	0.01 – 2,000,000 centipoise (cP)*
Minimum flow rate	10 mL/hr** at ~15 cP
Accuracy	1% of full scale
Temperature range	-50°C to 300°C
Interface	Luer Lock, Barbed fitting. Custom interface available upon request



\* Tests have been conducted up to 100,000 cP, but is not near the limitation of the device

\*\* Minimum flow rate is viscosity dependent. Decreases with increasing viscosity.