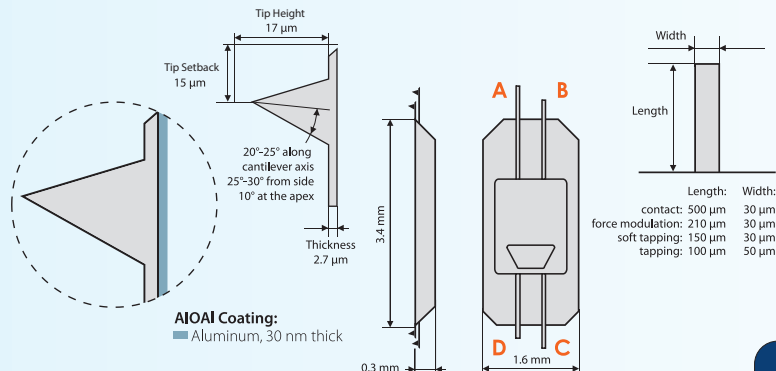




The **All-in-One** probes offer four cantilevers with different geometry for all topography measurement modes: **Contact**, **Force Modulation**, **Soft Tapping** and **Tapping Mode**.

The resonance frequencies and force constants are similar to the ones of the well-established modes **Contact-G**, **Multi75-G**, **Tap150-G** and **Tap300-G**.

The long cantilevers **A** for contact mode and **B** for force modulation mode are located at one end of the chip while the short cantilevers **C** for soft tapping mode and **D** for tapping mode are located at the opposite end.

The short cantilever end is marked by a trapezoidal pattern visible with bare eyes.

The **AFM Probe** is micromachined, made of monolithic Silicon, exhibiting excellent uniformity and a sharp tip radius. The consistent tip radius of less than 10 nm gives good resolution and reproducibility.

This probe uses an “on scan angle” symmetric tip to provide a more symmetric representation of features over 200 nm.

The **AFM Probe Holder Chip** fits most commercial AFMs as it is industry standard size.

**Chip size: 3.4 x 1.6 x 0.3 mm**

## All-In-One

## All-In-OneAI

10 probes

**AIO-10**
**AIOAI-10**

50 probes

**AIO-50**
**AIOAI-50**

**Application:** Several measurement modes

**Coating:** None (AIO) or 30 nm thick Aluminum reflex coating (AIOAI)

| Technical Data:        | TYPICAL VALUE       | RANGE          | TYPICAL VALUE  | RANGE                    |
|------------------------|---------------------|----------------|----------------|--------------------------|
| Cantilever/Similar to: | A / Contact-G       |                | B / Multi75-G  |                          |
| Resonance Frequency    | 15 kHz              | ± 5 kHz        | 80 kHz         | ± 30 kHz                 |
| Force Constant         | 0.2 N/m             | 0.04 - 0.7 N/m | 2.7 N/m        | 0.04 - 10 N/m            |
| Length                 | 500 µm              | ± 10 µm        | 210 µm         | ± 10 µm                  |
| Mean Width             | 30 µm               | ± 5 µm         | 30 µm          | ± 5 µm                   |
| Thickness              | 2.7 µm              | ± 1 µm         | 2.7 µm         | ± 1 µm                   |
| Cantilever/Similar to: | C / Tap150-G        |                | D / Tap300-G   |                          |
| Resonance Frequency    | 150 kHz             | 80 ± kHz       | 350 kHz        | 150 ± kHz                |
| Force Constant         | 7.4 N/m             | 1 - 29N/m      | 40 N/m         | 7 - 160 N/m              |
| Length                 | 150 µm              | ± 10 µm        | 100 µm         | ± 10 µm                  |
| Mean Width             | 30 µm               | ± 5 µm         | 50 µm          | ± 5 µm                   |
| Thickness              | 2.7 µm              | ± 1 µm         | 2.7 µm         | ± 1 µm                   |
| Tip Specs:             | height: 17 µm (±2); |                | radius: <10nm; | tip setback: 15 µm (±5); |