

# AFM Edge Probes

*SPECIALLY DESIGNED FOR EASY  
TIP DETECTION & PLACEMENT  
ON SAMPLE SURFACES*

## Highlights



### Customization

Available for various tip shapes, coatings and dimensions.



### Affordability

Affordable tips that provide high quality images.



### Compatibility

Compatible with all AFM's on the market.

## Positioning

AFM edge probes have the tip located on the end of the cantilever so users can easily detect the probe on the AFM camera display. The probe can be positioned over the exact area of the sample surface that needs to be imaged.

The edge probe has an extremely sharp tip due to thermal oxidation processes allowing the tip to achieve higher lateral resolution.



112 College Street, Suite 411  
Toronto, ON M5G 1L6  
Phone: +1 647-893-9565  
Email: [info@ndsolns.com](mailto:info@ndsolns.com)

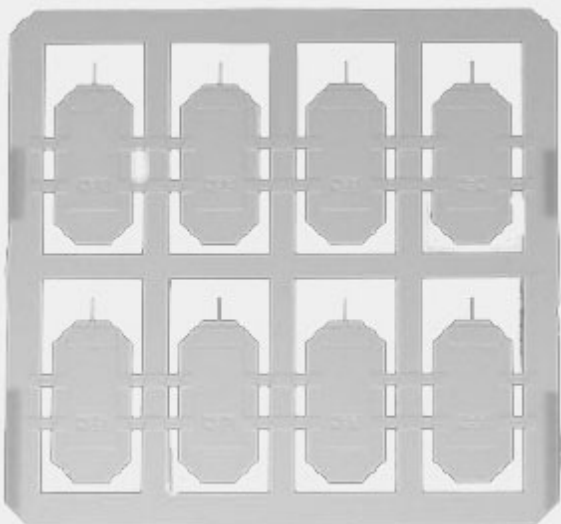


## Technical Features

- Precise tip location can be seen from the top through the AFM display
- Extremely sharp tip with a tilted structure for precise scan results

## Technical Data

|                                |                   |                               |             |
|--------------------------------|-------------------|-------------------------------|-------------|
| <b>Average Radius / r (nm)</b> | <10               | <b>Cantilever Shape</b>       | Rectangular |
| <b>Resonant Freq. (KHz)</b>    | 300 ± 100         | <b>Cantilever Length (µm)</b> | 125 ± 10    |
| <b>Force Constant (N/m)</b>    | 37 ± 24           | <b>Cantilever Width (µm)</b>  | 30 ± 5      |
| <b>Tip Height (µm)</b>         | 15 ± 1            | <b>Thickness (µm)</b>         | 4 ± 0.5     |
| <b>Tip Shape</b>               | Half Pyramidal    | <b>Cantilever Material</b>    | C-Si        |
| <b>Tip Material</b>            | C-Si              | <b>Chip Length (mm)</b>       | 3.4         |
| <b>Application</b>             | Tapping / Contact | <b>Chip Width (mm)</b>        | 1.6         |
| <b>Backside Coating</b>        | None              | <b>Chip Thickness (mm)</b>    | 0.3         |



## Customization

The NDS AFM probe is fabricated from a silicon substrate and can be coated with a variety of conductive, reflective and wear-resistant materials.

The tip height and shape; and the cantilever height, width, and length can all be altered as per request.