

AFM Probe Specifications:

Coating

Reflective Gold

Additional Info

The 160AC-FG AFM probes with carbon nanofibers at the end of the silicon AFM tips are designed for tapping mode AFM imaging of deep trenches. The typical fiber radius of curvature is 10 nm and the diameter is 50 nm at a height of 200 nm away from the apex.

The tetrahedral AFM tip is located precisely at the free end of the AFM cantilever. This allows the AFM tip to be positioned accurately over the area of interest on the sample surface.

The gold coating ensures high and stable laser reflectivity in air, vacuum and liquids. Please note that while the tetrahedral AFM tip and the AFM tip side of the AFM cantilever are gold coated, the diamond-like spike remains uncoated.

AFM Tip:

Shape	Height	Setback	Radius
High-Aspect-Ratio	14 μm (12 - 16 μm)*	0 μm	< 10 nm

* typical values

AFM Cantilever:

Cantilever	Shape	Force Const.	Res. Freq.	Length	Width	Thickness
High aspect ratio tapping mode AFM cantilever	Beam	26 N/m (8 - 57 N/m)*	300 kHz (200 - 400 kHz)*	160 μm (1 - 170 μm)*	40 μm (38 - 42 μm)*	4 μm (3.5 - 4.5 μm)*

* typical values