

AFM Probe Specifications:

Coating

Reflective Aluminum

Additional Info

AFM probes of the 55AC series are designed for high speed AFM imaging.

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 uncoated AFM tip offers a sharp AFM tip apex and chemical inertness. The back side aluminum coating significantly enhances the AFM cantilever reflectivity in air and vacuum. For operation in liquids we recommend using the 55AC-NG with a reflective gold coating.

AFM Tip:

Shape	Height	Setback	Radius	Half Cone Angle
Optimized Positioning	14 μm (12 - 16 μm)*	0 μm	< 7 nm	0° front, 35° back, <9° side

* typical values

AFM Cantilever:

Cantilever	Shape	Force Const.	Res. Freq.	Length	Width	Thickness
High frequency tapping mode AFM cantilever	Beam	85 N/m (35 - 215 N/m)*	1200 kHz (650 - 1850 kHz)*	65 μm (1 - 75 μm)*	31 μm (29 - 33 μm)*	2.9 μm (2.4 - 3.4 μm)*

* typical values