

HQ:NSC16/Pt

Conductive Tapping Mode AFM Probe with Long AFM Cantilever

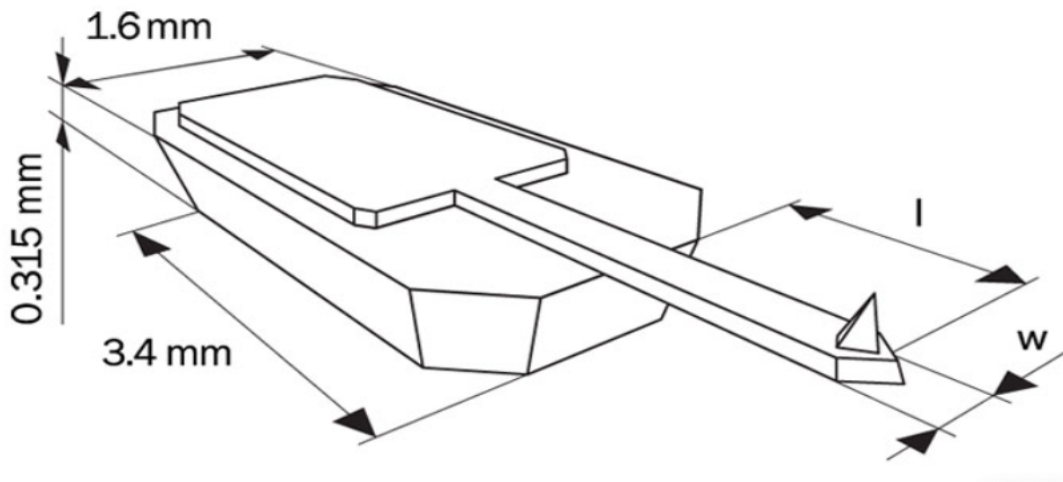
AFM probes of the HQ:NSC16 series have AFM cantilevers with a high spring constant and low resonance frequency (below 250 kHz) that can be used in tapping mode in SPMs with low-frequency feedback loops. These AFM probes also fit SPM systems that do not support short AFM cantilever arms.

The HQ AFM probes offer high consistency of the AFM tip radius, the AFM cantilever reflectivity and the quality factor.

The overall 30 nm platinum coating is electrically conductive and chemically inert. It also enhances the laser reflectivity of the AFM cantilever. The resulting coated AFM tip radius is below 30 nm.

Coating

Electrically Conductive



AFM Probe Specifications

AFM Tip

SHAPE	HEIGHT	FULL CONE ANGLE	RADIUS
Rotated	15 μm (12 – 18 μm)*	40°	< 30 nm

AFM Cantilever

CANTILEVER	SHAPE	FORCE CONST.	RES. FREQ.	LENGTH	WIDTH	THICKNESS
Cantilever A	Beam	45 N/m (30 – 70 N/m)*	190 kHz (170 – 210 kHz)*	225 μm (1 – 230 μm)*	37.5 μm (34.5 – 40.5 μm)*	7 μm (6.5 – 7.5 μm)*

* typical values