

## CFM - Conical Force Modulation mode

Conical Probe for Force Modulation Mode

### Typical Tip Dimensions

Tip Radius	~ 8 nm (guaranteed < 10 nm)
Tip Style/Geometry	Conical
Tip Height	15 $\mu\text{m} \pm 2.5 \mu\text{m}$
Tip Cone Angle	30 degrees

### Typical Cantilever Properties

Spring Constant	3 N/m
Resonant Frequency	75 kHz
Length	225 $\mu\text{m}$
Width	42 $\mu\text{m}$
Thickness	3.0 $\mu\text{m}$

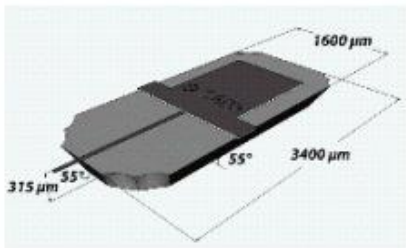
Aluminium coating on detector side of cantilever is available.

Please contact us about other coating options.

### Common Properties

Material	single crystal silicon, n-type, highly doped
----------	--

Cantilevers per chip	one
Cantilever shape	Rectangular
Tip offset	~ 10 $\mu\text{m}$
Tip Aspect Ratio	1.5:1
Chip Dimensions	3.4 mm x 1.6 mm x 315 $\mu\text{m}$
Alignment Grooves	Yes



Typical Cantilever Specification

Spring Constant	3 N/m	Range: 1 - 7
Resonant Frequency	75 kHz	Range: 45 - 90
Length	225 $\mu\text{m}$	Range: 215 - 235
Width	42 $\mu\text{m}$	Range: 40 - 45
Thickness	3 $\mu\text{m}$	Range: 2 - 4

Team Nanotec guarantees 80 % of it's Aspire-Probes meet the specifications.

ReflexCoating:	Al-reflex, None
Quantity:	Qty 10, Qty 25, Qty 100, Qty 250, Qty 400