

Cantilever Data*	Cant. 1	Cant. 2
Shape	Triangle	
Resonance Frequency	67 kHz	17 kHz
Force Constant	0.32 N/m	0.08 N/m
Length	100 μm	200 μm
Mean Width	13.5 μm	28 μm
Thickness	500 nm	500 nm

Leading edge in sharpness and durability

NanoWorld® Pyrex-Nitride AFM probes are designed for various imaging applications in contact or dynamic mode.

The Pyrex-Nitride AFM probes have silicon nitride AFM cantilevers with very low force constants and integrated oxide sharpened, pyramidal AFM tips with a height of 3.5 μm . The AFM tip is located 4 μm behind the free end of the AFM cantilever. The AFM probe series features a support chip that is made of Pyrex. The TR series features two different triangular AFM cantilevers.

The typical AFM tip radius of curvature is below 10 nm.

All chips are pre-separated prior to shipment and come in Gel-Pak containers.

Tip shape: Pyramid

Coating: Reflective Gold

Gold Reflex Coating

The gold reflex coating consists of a 70 nm thick gold layer deposited on the detector side of the AFM cantilevers which enhances the reflectance of the laser beam. Furthermore it prevents light from interfering within the AFM cantilever.

As the coating is almost stress-free the bending of the AFM cantilevers due to stress is less than 2 degrees.

Order Code	Quantity	Data Sheet
PNP-TR-20	20	yes
PNP-TR-50	50	yes