



*Ambient STM Head on Chassis*

Nanotec's® STM Head is used to obtain atomic-scale images of conductive surfaces. With three-dimensional profiles and a high resolution, Nanotec's® STM head is highly efficient at characterizing molecular structures on surfaces and imaging individual atoms on the surfaces of materials.

Easily exchangeable with the SFM head, our equipment can easily allow a user to perform SFM and STM studies on the same sample by simply exchanging Heads. With all the possibilities that the WSxM software offers for the UHV STM systems, it is a very versatile tool for the study of conductive samples.

Our STM Head is compatible with all of our chassis, and many standard features are automated within WSxM. Our STM Head comes supplied with five centimeters of Pt/Ir wire for tip fabrication and utilizes two springs and two magnets for stable attachment to the chassis of your choice.

## UHV STM

Our UHV STM Head is designed for incorporation into Ultra High Vacuum (UHV) chambers\*. An optional interface to Dulcinea is available (Beetle Interface). The Beetle Interface incorporates an I/V converter, relay box and appropriate cable with UHV connector. Both tip-sample coarse approach and scanning are implemented with this interface.

**B**eetle STM Head: This Head is based on a three piezoelectric tube system for scanning and tip-sample coarse approach. Special sample holders for use with the Beetle system can be supplied upon request. *(The design of this head is partially based in the patented design by Karl-Heinz Besocke, Julich, Fed. Rep. of Germany.)*



*Beetle UHV STM Head*

QUICK SPECIFICATIONS**	
DIMENSIONS:	12 x 6 x 12 CM (4.8 x 2.4 x 4.8 IN)
LATERAL RESOLUTION:	0.2 NM
VERTICAL RESOLUTION:	0.002 NM
ATOMIC RESOLUTION TESTED:	HOPG
INTEGRATED CURRENT-TO-VOLTAGE CONVERTER:	10 <sup>8</sup> (PER CLIENT'S REQUEST)

\* - UHV Chamber supplied by Client  
 \*\*Specifications subject to change without notice\*\*