

## ASYELEC.02-R2

### DESCRIPTION:

New and improved version of Asylum exclusive conductive probes with optimized iridium coated tip and lever for high resolution nanoelectrical measurements with outstanding wear resistance.

Asylum electrolevers are ideal choice for several electrical applications such as conducting scanning probe microscopy (c-AFM) in air, electric force microscopy (EFM), Kelvin Probe Force Microscopy (KPFM), Scanning Capacitance Microscopy (SCM), and Scanning Spreading Resistance Microscopy (SSRM) with an unprecedented combination of sharpness and long tip life time as a metal coated probe.

Asylum electrolevers provide:

**1) Long life time:** Optimized iridium coating shows longer tip life time compared to other metal coated probes while maintains high electrical conductivity for electric measurements requiring high electro-potential resolution.

**2) High resolution:** Thin and sharp tetrahedral tip structure combined with thin metal coating makes the electrolever prominently sharp among metal-coated probes. This probe resolves sample structures precisely both electrically and topographically.

**3) Visible apex tip:** Fine structure of interest can be pointed accurately by electrolever using the optical microscopy as the tetrahedral tip is positioned on the very end of the cantilever, and it is not blocked by the body of the cantilever.

ASYELEC.02.R2 SPECIFICATION

<b>Frequency (kHz):</b>	<b>300</b>
<b>Max Frequency (kHz):</b>	<b>380</b>
<b>Min Frequency (kHz):</b>	<b>240</b>
<b>Spring Constant (N/m):</b>	<b>42.0</b>
<b>Max Spring Constant (N/m):</b>	<b>80.0</b>
<b>Min Spring Constant (N/m):</b>	<b>27.0</b>
<b>Tip Radius (nm):</b>	<b>25.0</b>
<b>Tip Height (nm):</b>	<b>12.5</b>
<b>Max Tip Height (nm):</b>	<b>15.0</b>
<b>Min Tip Height (nm):</b>	<b>10.0</b>
<b>Length, Width, Thickness (µm):</b>	<b>160 x 45 x 4.6</b>
<b>Tip Shape:</b>	<b>3 sided</b>
<b>Tip Material:</b>	<b>Silicon</b>
<b>Tip Coating:</b>	<b>Ti/Ir</b>
<b>Reflective Coating:</b>	Ti/Ir
<b>Manufacturer:</b>	Asylum Research