Single Point Kelvin Probe System

KP020

System Description
Our Single-Point Kelvin Probe System is the introductory system to the KP Technology range. The economical system enables users to quickly record non-scanning data in a number of different modes to match the exact requirement of the sample under investigation. For rapid events, the KP020 can record work function at a rate of 1000 work function measurements per minute, or, alternatively, the system will track slow work function evolution over a number of days.

The KP020 provides the perfect platform for upgrades to Scanning, Air Photoemission and Surface Photovoltage add-on modules.

Features
- Work Function Measurement by Kelvin Probe
- Work Function Resolution of <3meV
- Modular System for Upgrades and Add-Ons
- Economical, Entry System
- USB Version Plug-and-Play

Applications
- Organic and Non-Organic Semiconductors
- Metals
- Thin Films
- Solar Cells and Organic Photovoltaics
- Corrosion
Single Point Kelvin Probe System
KP020

System Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>KP020</th>
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<tbody>
<tr>
<td>Tip Material / Diameter</td>
<td>2mm Gold Tip</td>
</tr>
<tr>
<td>Work Function Resolution</td>
<td>&lt;3meV</td>
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<tr>
<td>Probe Translation</td>
<td>25mm Manual Translator</td>
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<tr>
<td>Visualisation</td>
<td>Single-Point Work Function / Contact Potential Difference Scans</td>
</tr>
<tr>
<td>Oscilloscope</td>
<td>Digital TFT Oscilloscope for Real Time Signal</td>
</tr>
<tr>
<td>Test Sample</td>
<td>Gold on Aluminium Sample</td>
</tr>
<tr>
<td>Control Supplied</td>
<td>PC Control with Dedicated Software</td>
</tr>
<tr>
<td>Control Possible</td>
<td>USB Control with Dedicated Software available upon request</td>
</tr>
<tr>
<td>Detection System</td>
<td>Off-Null with Parasitic Capacity Rejection</td>
</tr>
<tr>
<td>Enclosure</td>
<td>450mm x 450mm Optical Enclosure Included</td>
</tr>
<tr>
<td>Optical System</td>
<td>Colour Camera with Zoom Lens and Monitor</td>
</tr>
<tr>
<td>Warranty</td>
<td>12 Months</td>
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Upgrades and Add-Ons

- Air Photoemission System
- Surface Photovoltage (QTH or LED)
- Surface Photovoltage Spectroscopy (400-1000nm)
- Upgrade to Scanning Kelvin Probe System
- Relative Humidity Control and Nitrogen Environmental Chamber

The Company

KP Technology was founded with the aim of bringing to the market new surface research tools. These tools would firstly allow specialists to investigate surface phenomena, secondly provide equipment pathways for non-specialists, and finally educate scientists, engineers and technologists in the capabilities of these emerging technologies.

KP Technology also performs a significant amount of material research and training consultancy, mostly based upon the Work Function or Surface Potential evaluation of client samples. Along with a strong Research and Development Division and over 300 systems shipped worldwide, this has placed KP Technology as the Number one supplier of Kelvin Probes in the world.

Contact

For quotation requests, further information or to discuss any research or particular measurements, please feel free to contact us:

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Or visit our websites
www.kelvinprobe.com
www.airphotoemission.com

KP Technology was the proud winner of the Queens Award for Enterprise: International Trade 2013