S-1160 series probe stations keeping it simple and inexpensive

A simple probing solution for DC Parametric testing and more

The S-1160 probe station is used universally to achieve precise measurement results incorporating proven technology for I-V/C-V measurements. The S-1160 is equipped with ergonomically positioned controls and is available with a significant variety of options giving users greater application flexibility.
Signatone’s Objectives

- Provide a simple, ergonomic probing platform that creates successful testing in every lab and for every user
- Provide high quality equipment that maintains stability and accuracy for many years in the lab
- Enhance test parameters to pA and fA measurement ranges for less cost
- Provide user options that create more application flexibility (this saves you money)
- Provide technical expertise and probing directions for both novice and experienced users
- Listen to customer needs and configure a probing solution for every request

The S-1160 optimizes user test time and accommodates both stereozoom and high magnification microscopes and CCD camera mounting. At Signatone we know that X-Y-Z accuracy is the name of the game, whether you are moving the microscope stage or the DUT stage, the S-1160’s smooth X-Y-Z motion control is unrivaled. The singular, steel platen provides a stable platform for up to 12 Signatone micropositioners. The platen quick lift handle is ergonomically placed for quick up-down motion of the platen moving your probe tips out of contact on your DUT; this allows for quick X-Y positioning of the DUT stage and DUT loading and unloading. The platen fine adjustment knob gives users 5 micron resolution for fine Z adjustments for all of their probes simultaneously and allows users the height adjustments that they need for a variety of device sizes and shapes up to 1.35 inches in thickness.

The S-1160’s DUT stage provides smooth, accurate X-Y-Z transitioning and has vacuum zones that will hold a variety of DUT sizes. The S-1160 is available with a 4”, 6” and 8” chucks and is easily upgraded on site when needed.

The S-1160 is available with many options allowing for pA and fA measurement ranges accommodating both COAXIAL and TRIAXIAL configurations. Whether you are using a probe card or our COAXIAL or TRIAXIAL probes the S-1160 is easily equipped to meet your test parameters.

Options**

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<th>PSDB-1160:</th>
<th>Probe Station Dark Box, light tight, electrically shielded enclosure</th>
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<tr>
<td>A-6XG / A-8XG:</td>
<td>Ambient TRIAXIAL Chuck options for 6” and 8” chuck replacements for &lt;30fA measurements</td>
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<tr>
<td>FS-160:</td>
<td>Fine Stage for D.U.T stage provides 0.5” X-Y motion with 1 micron resolution</td>
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<tr>
<td>S-1060 / S-1070:</td>
<td>Hot Chuck controllers for use with 4”, 6” and 8” hot chucks (TRX hot chucks are also available)</td>
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Specifications

- Width: 27 inches
- Depth: 22 inches
- Height: 19.5-22 inches (with microscope)
- Shipping Weight: 125 pounds

The S-1160 is a manual probe station upgradable from 4” to 6” and 8” with many configuration options for high quality probing at low end prices.

*ask about our WL-1160 RF probe station series
**S-1160 Series**

**Trinocular Stereozoom or High Magnification Microscopes:**
- Optional fiber optic illumination
- CCD or Digital color camera

**Supports: DC, Coaxial, and Triaxial Probes**

**Large Steel Platen:**
- Planarized to the chuck provides a stable platform for up to 10 micropositioners

**Linear Platen Lift Lever:**
- Raises the platen 0.375” for probe tips contact separation

**Chuck Rotation Lever:**
- Provides 360° rotation for easy alignment.
- Optional SRL-160 locks the stage in place

**Vacuum Chuck:**
- Vacuum rings and a center vacuum hole to hold from single die to 4", 6" and 8" wafers
- Flatness = 0.0005”
- Optional Coaxial or Triaxial configuration

**Vibration Dampening:**
- Multiple low profile, rubber feet

**Microscope 2” X-Y Motion control knobs:**
- Fine Platen Adjust Knob:
  - Provides 1.35” fine platen Z motion control

**Vacuum Port and Signal Connection Panel:**
- Includes 12 vacuum ports (6 on each side)
- 12 pin-jack signal connectors with banana jack termination on the back panel

**Vacuum Port Control:**
- Micropositioner vacuum intensity adjustment

**Chuck X-Y Motion Control:**
- Coax X-Y knob for ease of use
- 5µ (micron) resolution

**Rigid Cast Aluminum Base:**
- Internal stabilizer ribs provide extra strength and stability

**System Configurator**

**S-1160S###**
- "S" option: "boom" style Microscope mount (for use with low powered optics)

**S-1160A###**
- "A" option: 50mm X-Y Microscope mount (for use with low or high powered optics)

**S-1160D###**
- "D" option: 150mm X-Y Heavy Duty Microscope stage for mounting High powered microscopes

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**SIGNATONE**

Lucas Signatone Corporation – Tel: 408-848-2851
393-J Tomkins Court – Gilroy CA 95020 USA
sales@signatone.com / www.signatone.com