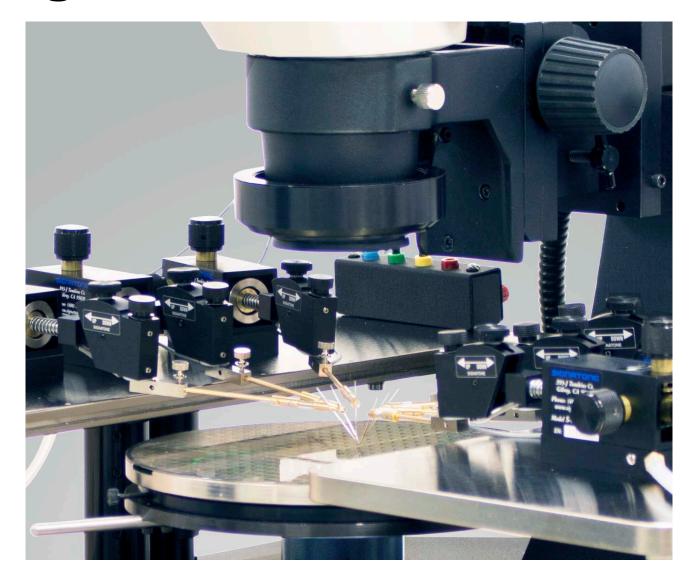


# Signat one S-725 General Purpose, 3-Axis Micropositioner



### FEATURES / APPLICATIONS

Signatone offers an extensive line of Micropositioners to address virtually every probing and measurement application, ranging from the very simple to the highly complex sub-micron high-resolution positioners.

The S-725 General Purpose 3-axis Micropositioner accommodates the majority of Signatone's probe arms and single needle probes allowing for a variety of test configurations. Available with vacuum or magnetic base, pivot, spring, or rigid head, 3-Axis direction control, this positioner is very economically priced and recognized as the best value in the probing market.

#### **Designed for a Variety of Probing Applications**

- IV/CV Coaxial-Low Current
- Failure Analysis
- Pad Probing
- High Power Test
- Resistivity Measurements
- MEMS Test
- Your Application



### SPECIFICATIONS

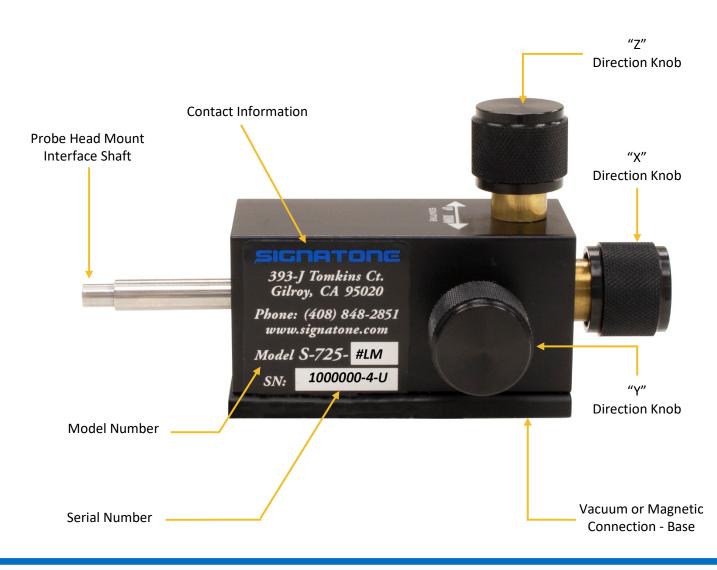
#### Model S-725

Travel range	X = 19 mm Y-Z = 15 mm
Feature resolution	5 μm
Screw resolution	80 TPI
Mounting	Vacuum, Magnetic
Footprint (W/D)	67mm x 35mm

#### Application

Small footprint/ allows for multiple probes	
CV/IV coaxial probing	
Failure analysis	
Resistivity -Duel Kelvin 4-point probing	
Pad probing	
High-power probing	

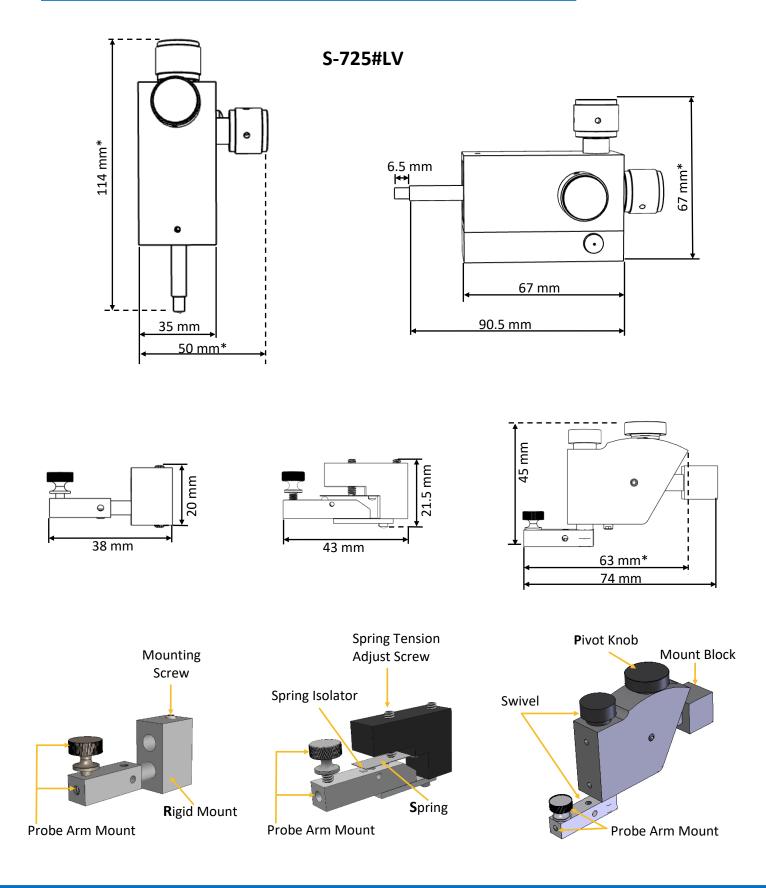




S-725: Data Sheet v1.6 2022 © SIGNATONE Corporation 2021 - Data subject to change without notice

SIGNATORE www.signatone.com

## DIMENSIONS – Rigid, Spring and Pivot Head Configurations

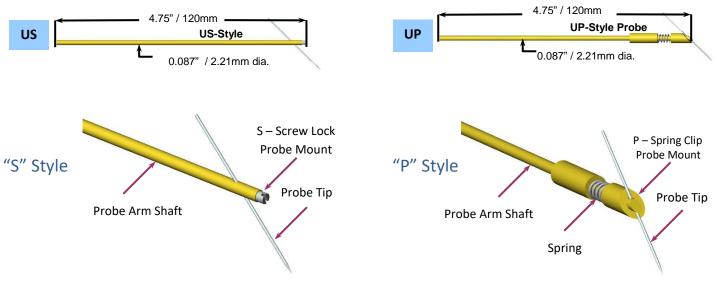




# Signatone ProBe Hol Der Series

Offering a wide variety of probe holders to suit virtually every probing requirement. This Signatone selection guide is for our standard and coax isolated probe holders designed for use with all Signatone Micropositioners

The Signatone "U" Series probe tip holder comes in one universal length of 4.75". This holder is made to be bent or cut to length by the customer. The "U" style holder is available in the following Signatone "Tip-Mount" Options



The Signatone "S" or screw locking option probe tip mount secures the probe tip with a set screw allows for easy and quick probe replacement. The Signatone "P" or Spring Clip option probe tip mount allows for a quick and easy probe change without the need for any tools.

|--|

PART #	Material	Length	Probe Mount	Connection	Typical Use
US	Brass	120mm	Screw- Lock	Mini-banana jack	<u>&gt;</u> 1μΑ
UP	Brass	120mm	Spring- Clip	Mini-banana jack	<u>&gt;</u> 1µA

## **C PROBE – SELECTION GUIDE**

	Coax Probe (C)	Triax Probe (T)	Kelvin Probe (K)
Max voltage	500 V	500 V	500 V
Temperature range	-60 °C to 300 °C	-60 °C to 300 °C	-60 °C to 300 °C
Leakage current	< 50fA	< 20fA	< 20fA
Connectivity	BNC	Standard Triax	SSMC
Connectivity type	Single Coaxial	Single low noise Triaxial	Force/Sense Coax
Characteristics impedance	50 Ohms	50 Ohms	50 Ohms
Residual capacitance	< 80fF	< 80fF	< 80fF
Probe holder material	Brass	Brass	Brass
Probe tips material	Tungsten	Tungsten	Tungsten
Probe tips sizes	0.5 μm – 25 μm	0.5 μm – 25 μm	0.5 μm – 25 μm
Minimum pad size	25 μm x 25 μm	25 μm x 25 μm	25 μm x 25 μm







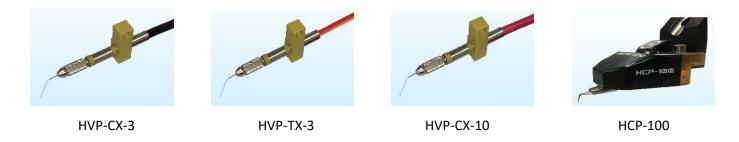
Coax Probe

**Triax Probe** 

Coax Kelvin Probe

## High Voltage/High Current PROBE –SELECTION

	High Voltage Probes			High Current Probe
Model	HVP-CX-3	HVP-TX-3	HVP-CX-10	HCP 100
Max Voltage	3 kV	3 kV	10 kV	500 V
Max Current	1 A DC/30 A Pulsed	120 mA DC	20 mA DC	10 A DC/100 A Pulsed
Temperature Range	-60°C to 300°C	-60°C to 300°C	-60°C to 300°C	-60°C to 300°C
Leakage Current	< 200 pA @ 3 kV, < 5 pA @ 10 V	< 1 pA @ 3 kV, < 100 fA @ 10 V	< 100 pA @ 10 kV	N/A
Connector Type	SHV	HV Triax	UHV Coax	HV Banana
Replaceable Tip	Yes	Yes	Yes	Yes
Probe Material	W	W	W	BeCu or W





## Signat one ProBe Tips

Offering a wide variety of passive probe tips to suit virtually every probing requirement. This selection guide is our standard offering / special sizes and materials available.

Model Number	Material	TIP Diameter	Shank Diameter	Length
SE-10T	Tungsten	1 µm	0.254mm	31.75mm
SE-10TZ	Tungsten	1 µm	0.254mm	31.75mm
SE-20BC	Beryllium Copper	12 µm	0.51mm	31.75mm
SE-20T	Tungsten	3.5 µm	0.51mm	31.75mm
SE-20TB	Tungsten	20 µm	0.51mm	31.75mm
SE-20TBL	Tungsten	20 µm	0.51mm	50.1mm
SE-20TZ	Tungsten	3.5 µm	0.51mm	31.75mm
SE-O	Osmium	12 µm	0.63mm	19mm
SE-P	Palladium	12 µm	0.63mm	19mm
SE-S	Steel	12 µm	0.63mm	28.45mm
SE-SM	Tungsten	1 µm	0.51mm	50.1mm
SE-SMS	Tungsten	0.2 µm	0.51mm	50.1mm
SE-T	Tungsten	5 µm	0.63mm	31.75mm
SE-TB	Tungsten	25 µm	0.63mm	31.75mm
SE-TC	Tungsten Carbide	12 µm	0.63mm	31.75mm
SE-TG	Gold Plated Tungsten	12 µm	0.63mm	31.75mm
SE-TL	Tungsten	5 µm	0.63mm	50.1mm
SE-TZ	Tungsten	5 µm	0.63mm	31.75mm
SM-10	Tungsten	0.2 µm	0.51mm	30.5mm
SM-35	Tungsten	0.7 µm	0.51mm	30.5mm

Probes with tungsten shank can be cut and bent to a particular shape by the end user.

Z bend models are also available, for more information, contact sales@signatone.com

Packaging: Tips are sold by the box including quantity of 5 tips.

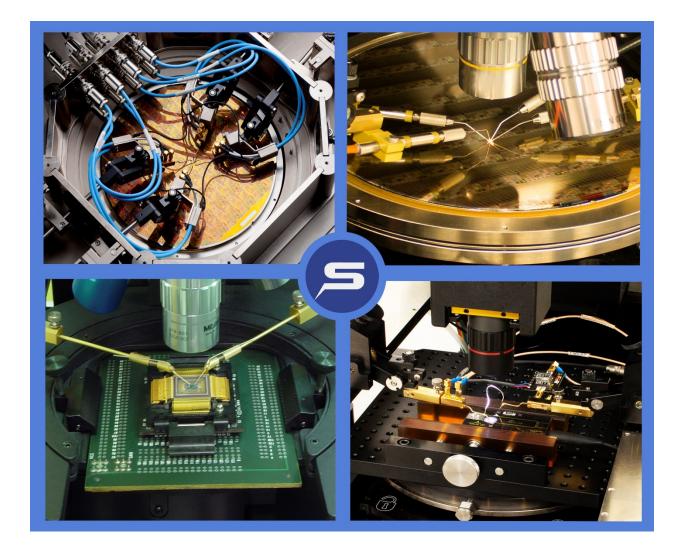
Discounts available on quantity purchases of 20-100 box, +100 boxes.

(contact factory for details)



#### WARRANTY

- Standard Warranty 12 months \*
  For Extended Warranty and Service Contracts contact Signatone Corp. for more information
- \* See Signatone Corporate Terms and Conditions of Sale for further details.



- North America: <u>Sales.NA@signatone.com</u>
- Europe: <u>Sales.Europe@signatone.com</u>
- Asia: <u>Sales.Asia@signatone.com</u>