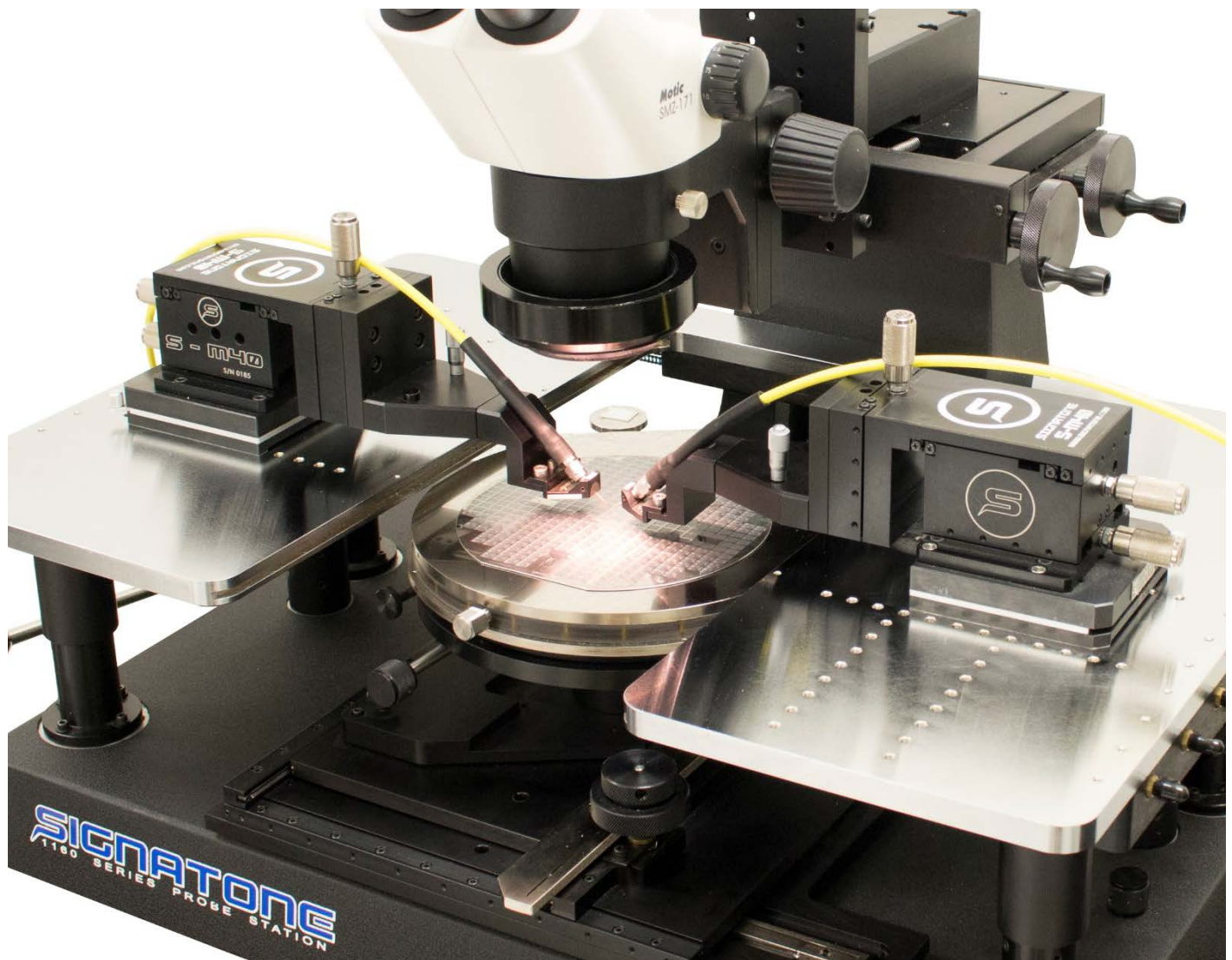


## Signatone S-M40 Stable, In-Line RF Micropositioner



### ❖ 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-M40 stable 4-axis In-Line Micropositioner For RF probe heads, High power probe heads, 4-point resistivity probe heads, Wedge cards, glass slides for material handling and a variety of other uses.

The smooth motion of the X-Y & Z knobs along with the micrometer driven planarization knob makes the S-M40 one of the most popular positioners in the RF and High-power probing markets.

#### Designed for a Variety of Probing Applications

- RF DC-110 GHz
- High Power Test
- Resistivity Measurements
- Wedge Card Probing
- Material Transfer
- MEMS Test
- Your Application

❖ **SPECIFICATIONS**

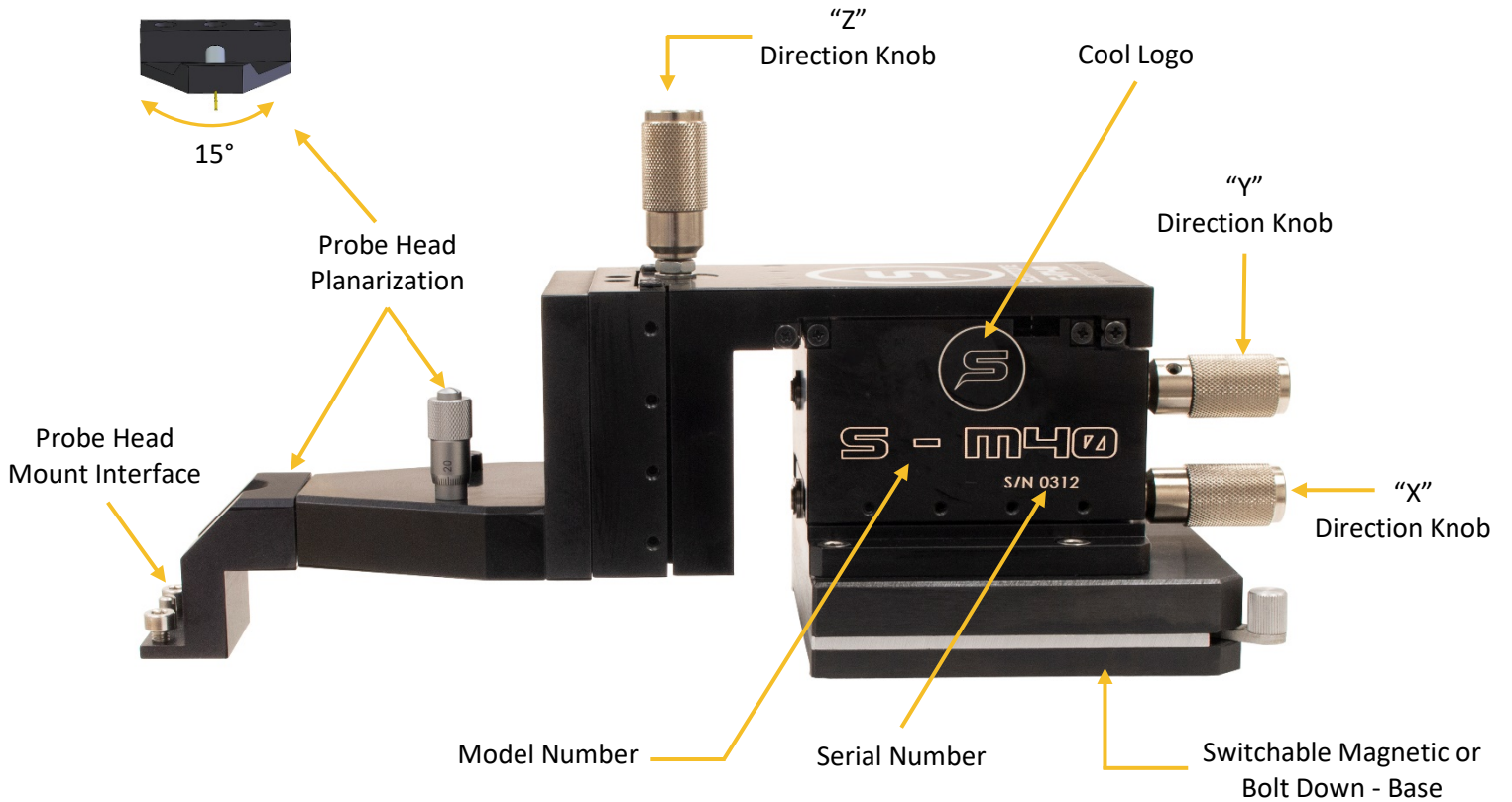
**Model S-M40**

Travel range	X-Y -Z = 25 mm
Planarization range	± 7.5° (0.1° resolution)
Feature resolution	2µm
Mounting	Switchable Magnetic or Bolt-down
Orientation	North-South/ East-West
Footprint	See Next Page

**Application**

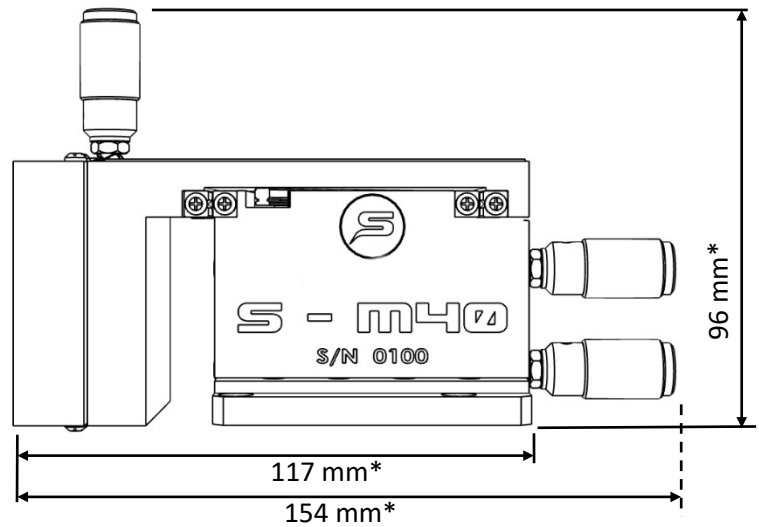
Stable base/ allows for accurate probing
RF DC to 110 GHz
Wedge cards
4-point probing
High-current probing

S-M40-MMEW

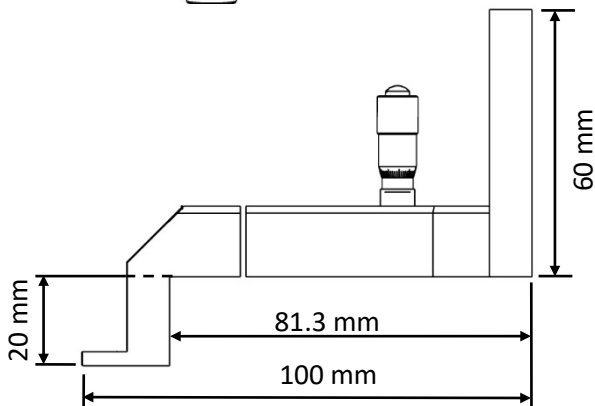


❖ **DIMENSIONS – S-M40 Body, Switchable Magnet Base, Bolt Down - Hard Mount**

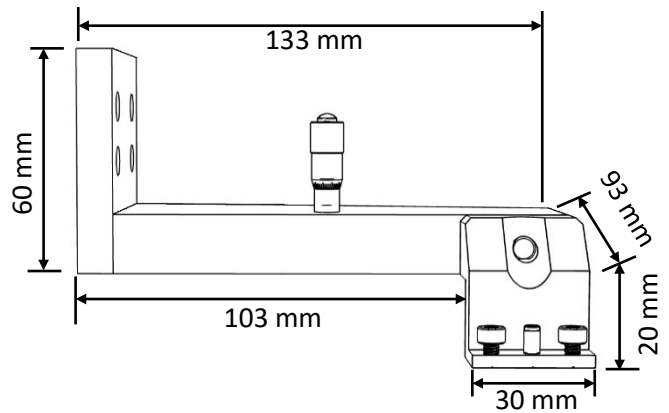
**S-M40**



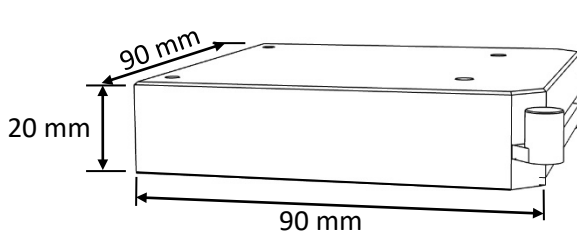
Note \* = Center of Travel



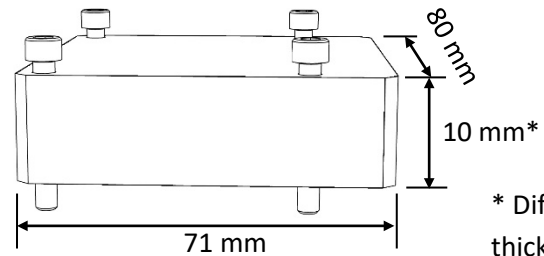
East-West Probe Arm



North - South Probe Arm



Switchable Magnet Base



Hard Mount – Bolt Down Base

\* Different thickness' available

**❖ RF PROBE –SELECTION GUIDE**



**Cable Interface**

	<b>SP-40A</b>	<b>SP-50A</b>	<b>SP-67A</b>	<b>SP-110H</b>	<b>SP-145</b>
<b>Frequency</b>	DC-40GHz	DC-50GHz	DC-67GHz	DC-110GHz	DC-145GHz
<b>Connector</b>	2.92mm	2.4mm	1.85mm	1.0mm	0.8mm
<b>Tip Configuration</b>	GS/SG/GSG	GS/SG/GSG	GS/SG/GSG	GS/SG/GSG	GSG
<b>Pitch Range</b>	50μ - 2540μ	50μ - 1250μ	50μ - 1250μ	50μ - 1250μ	50μ - 200μ
<b>Insertion Loss</b>	<.8db	<1.0db	<1.1db	<1.5db	<1.75db
<b>Return Loss</b>	> 18db	>18db	>14db	>15db	>15db



**Calibration Substrates**

<b>GSG</b>	<b>SP-CS-5</b>	<b>SP-CS-9</b>	<b>SP-CS-10</b>	<b>SP-CS-18</b>
Pad Size	50μ X 50μ 100μ X 100μ 150μ X 150μ	100μ X 100μ	150μ X 150μ	300μ X 300μ
Pitch Range	75μ - 250μ	250μ - 600μ	600μ - 1250μ	1250μ - 2540μ

<b>GS/SG</b>	<b>SP-CS-8</b>	<b>SP-CS-14</b>	<b>SP-CS-11</b>	<b>SP-CS-17</b>
Pad Size	50μ X 50μ 100μ X 100μ 150μ X 150μ	100μ X 100μ	150μ X 150μ	300μ X 300μ
Pitch Range	50μ - 200μ	200μ - 400μ	400μ - 1250μ	750μ - 2540μ

<b>GSG &gt; 110GHz</b>	<b>SP-CS-15</b>
Pad Size	25μ X 25μ
Pitch Range	40μ - 150μ (SOLT) 30μ - 150μ (LRM)



**RF Cables**

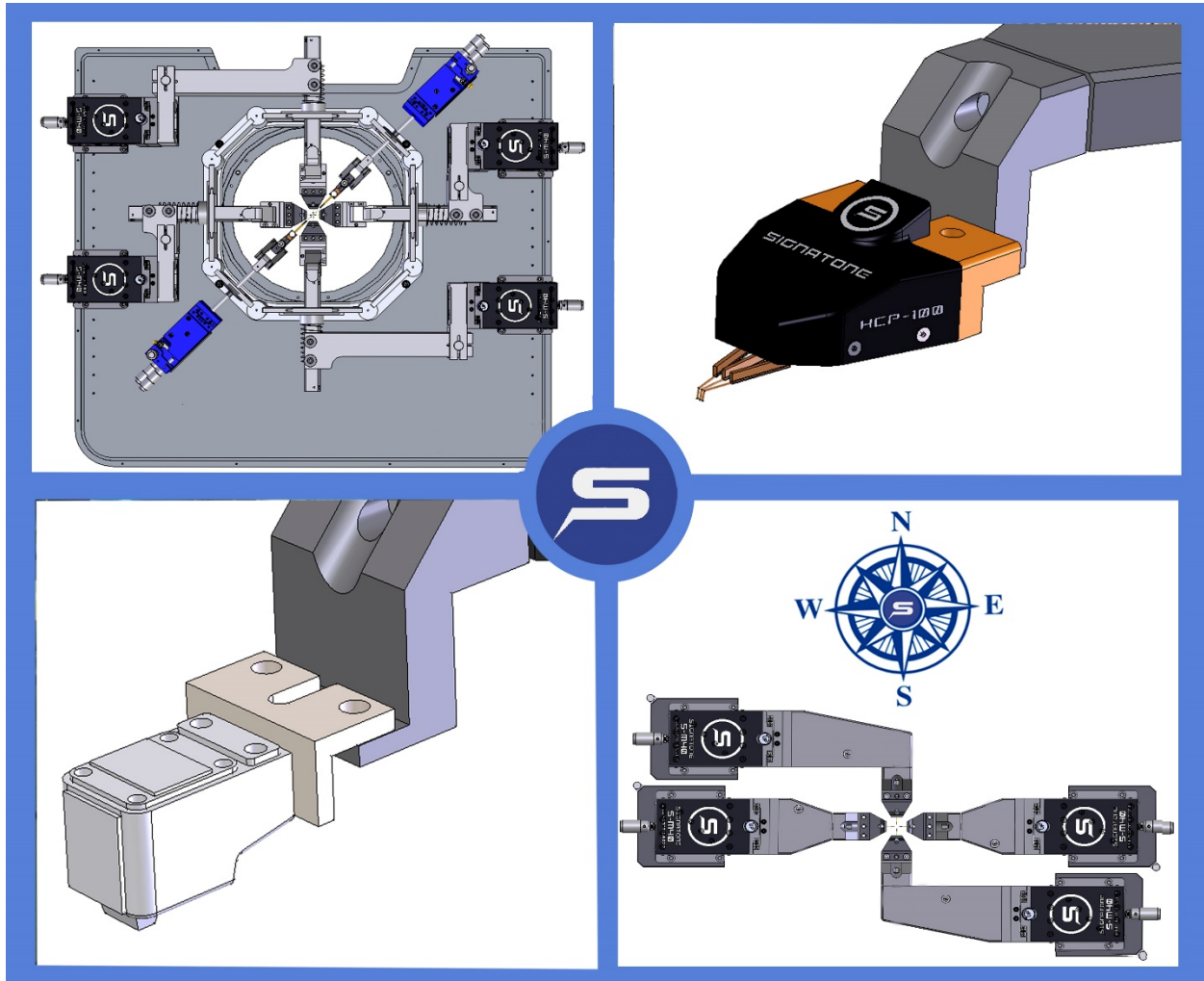
	<b>RFC-40</b>	<b>RFC-50</b>	<b>RFC-67</b>	<b>RFC-110</b>
<b>Frequency Range</b>	DC - 40GHz	DC - 50GHz	DC - 67GHz	DC - 110GHz
<b>Length</b>	4 Ft.	4 Ft.	3 Ft.	*
<b>Connectors</b>	2.92 M – 2.92 F	2.4 M – 2.4 F	1.85 M - 1.85 F	1.0 M - 1.0 F

\* Contact Factory

❖ **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.



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