

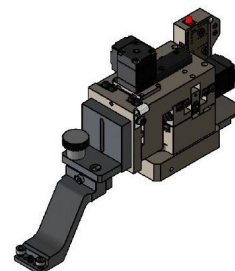
# MANIPULATORS



## DATA SHEET

### MA-9100 PROGRAMMABLE

The MA-9100 is a small footprint, multi-purpose manipulator primarily used to probe I/O pads for numerous applications - DC, High Frequency, High Power and Optoelectronic and more. It is rigidly built to handle additional stress when using heavy high frequency probe arms, probes and cables. It has independent and motorized X, Y and Z travel of 15 mm. Motors are in-line, which enables placement anywhere around the platen opening without restrictions - eliminating the need for dedicated left or right-handed manipulators. Cross roller bearings provide precise linear motion on all three axes. Small footprint control electronics and joystick controller allows up to eight (8) manipulators to be used on SemiProbe or competitors probe systems. Can be controlled from a PC via remote command.



#### FEATURES AND BENEFITS

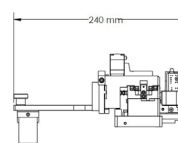
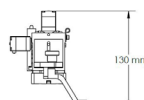
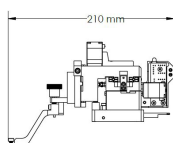
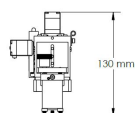
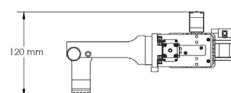
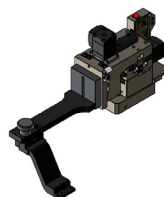
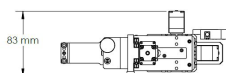
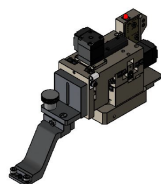
- Multi-Purpose - easily converted to meet a variety of applications
- Adjustable probe arm faceplate provides additional Z travel of about +/- 16 mm
- Uses all SemiProbe standard probe arms - DC, HF, HV, HC, Optical and more
- 8 independent manipulators can be placed on the platen
- Ideal for I/O bond pad and internal probing ( $>1\text{ }\mu\text{m}$ )

#### SPECIFICATIONS

|                                 |   |
|---------------------------------|---|
| <b>Feature resolution:</b>      | 0.35 $\mu\text{m}$  |
| <b>Travel Range (X,Y,Z):</b>    | 15/15/15 mm   |
| <b>Velocity (X,Y,Z):</b>        | 0-950 mm/sec  |
| <b>Step Resolution (X,Y,Z):</b> | 0.2 $\mu\text{m}/\text{step}$                               |
| <b>Mounting:</b>                | Vacuum, Magnetic, Bolt Down                                 |
| <b>Dimensions:</b>              | 117 x 43 x 112 mm (L, W, H) (manipulator and magnetic base) |
| <b>Weight:</b>                  | 24 ounces (manipulator and magnetic base)                   |
| <b>Applications:</b>            | General purpose measurements with appropriate probe arms    |

**Note:** Data and specifications vary depending on probe system configurations and accessories

#### PHYSICAL DIMENSIONS



## ORDERING OPTIONS



MA-9100 Programmable Manipulator Kit includes the manipulator, joystick controller with LED indicator, power supply and USB cables (manipulator to controller and joystick to controller). The power supply is 110/220 V, 50/60 Hz and is supplied with the appropriate plug for the country shipped to. A complete manipulator will include a base, an adjustable probe arm face plate and a probe arm. Customer to specify the type of base and probe arm desired.

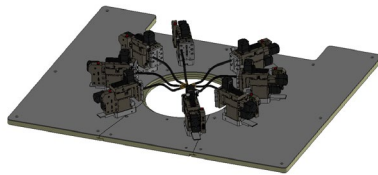
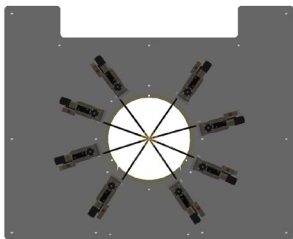
**Bases:** Magnetic, Vacuum or Bolt Down

**Probe Arms:** Coaxial, Triaxial, Kelvin, High Frequency, Opto, High Voltage, High Current and more

**Adjustable Probe Arm Faceplate:** required to affix SemiProbe probe arm to the manipulator body

**Controller:** 4 unit or 8 unit

Motors are placed at the rear (X & Y) and top (Z) of the MA-9100 to minimize footprint. Up to eight (8) manipulators can be placed on SemiProbe PS4L probe system platen. Please contact SemiProbe if there are other configurations required.



SemiProbe

276 E. Allen Street, Winooski, VT 05404

P: 802-860-7000

[info@semiprobe.com](mailto:info@semiprobe.com)

[www.semiprobe.com](http://www.semiprobe.com)



Copyright 2013 SemiProbe, Inc. All rights reserved. Probe System for Life and SemiProbe are registered trademarks. Lab Assistant, WIS Wafer Inspection and Pilot control software are trademarks of SemiProbe, Inc. All other trademarks are the property of their respective owners.

A-LIT-MA-9100-PM 1222