MANIPULATORS



DATA SHEET

MA-8500-PROGRAMMABLE

The MA-8500 is a large footprint, multi-purpose manipulator primarily used to probe I/O pads for high frequency/microwave/mmWave applications. It is rigidly built to handle additional mechanical stress when using high frequency probe arms, probes, cables adapter plates and frequency extender modules. It has independent and motorized X, Y and Z travel of 25 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. For most applications they are positioned in a West/East and North/South direction. Cross roller bearings provide precise linear motion on all three axes. Small footprint control electronics and joystick controllers allow up to four (4) MA-8500 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
- <u>Primarily used for HF/Microwave/mmWave applications</u>
- Allows frequency extension modules to be integrated short and long versions tuners & frequency extenders
- 4 independent MA-8500 PM manipulators can be placed on the platen. Platen has space for 4 additional DC manipulators
- Ideal for I/O bond pad probing (>40 μm)

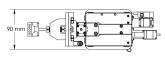
SPECIFICATIONS

Feature resolution:	5 µm
Travel Range (X,Y,Z):	25/25/25 mm
Velocity (X,Y,Z):	0-950 mm/sec
Step Resolution (X,Y,Z):	0.2 um/step
Mounting:	Magnetic, Bolt Down
Dimensions:	290 x 90 x 150 mm (L, W, H) (manipulator, magnetic base and West/East HF Probe Arm)
Weight:	3.0 Kg (manipulator and magnetic base)
Applications:	General purpose HF/Microwave/mmWave measurements with appropriate probe arms

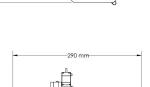
Note: Data and specifications vary depending on probe system configurations and accessories

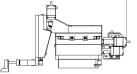
PHYSICAL DIMENSIONS

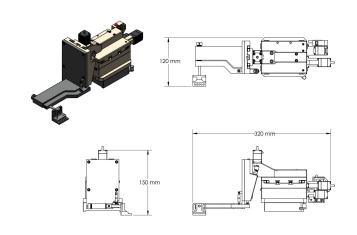












ORDERING OPTIONS

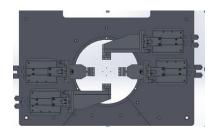




The MA-8500 Programmable Manipulator Kit includes the manipulator, joystick controller with LED indicator, power supply and USB cables (manipulator to controller and joystick to controller). The power supply is 110/220 V, 50/60 Hz and is supplied with the appropriate plug for the country shipped to. A complete MA-8500 High Frequency programmable manipulator will include the manipulator body, a base, and an HF probe arm. Customer to specify the type of base (magnetic or bolt down) and probe arm (West/East or North/South) desired.

Bases: Magnetic or Bolt Down **Probe Arms:** High Frequency – West/East **Controller:** 4 unit or 8 unit

Motors are placed at the rear (X & Y) and top (Z) of the MA-8500 to minimize footprint. Up to four (4) manipulators can be placed on SemiProbe PS4L probe system platen. Please contact SemiProbe if there are other configurations required.



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