

Series 59500 Aperture Field Probe

Features

- Designed to evaluate the quality of your antenna/RCS test zone

Description

In making precision antenna measurements, it is desirable, in most instances, to determine the nature of incident field over the test aperture. This is necessary to evaluate field variations caused by extraneous signals arriving at the test aperture.

The MI Technologies Series 59500 Field Probe can be mounted to a MI Technologies Polarization Positioner or the azimuth axis of an azimuth-over-elevation positioner. On some positioners, special mounting adapters may be required.



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The position of the carriage, which is motor controlled, can be indicated on a MI Technologies Series 1840 or 1880 Position Indicator. The synchro signal can be used to drive a Series 1500 Pattern Recorder so that a plot of the received field versus the carriage radial distance may be obtained.

The Model 56040 Polarization Positioner is available for mounting to the probe carriage. This provides a convenient means of remotely controlling the polarization of the probe antenna.

Specifications

Model Number	59510	59511	(-)-1 Probe Rotator
Carriage	9 ft, 2.7 m (± 4.5 ft from mounting)	18 ft, 5.5 m (± 9.0 ft from mounting)	
Maximum Load	45 lbs (20.5 kg)	45 lbs (20.5 kg)	20 lbs (9 kg)
Maximum Bending Moment	50 ft-lbs (68 N-m)	50 ft-lbs (68 N-m)	30 ft-lbs (40 N-m)
Synchro Ratio	1 inch of carriage travel is equivalent to 1° of dual synchro readout		1:1 and 1:36
Carriage Drive Motor	1/8 hp, 120 V dc	1/8 hp, 120 V dc	
Nominal Carriage Speed	0 to 14 ft per min	0 to 14 ft per min	
Recommended Positioner	Models 53150 or 56260 and larger Models 55150 and larger		
Net Weight lbs (kg)	175 (80)	210 (95)	25 (12)
Shipping Weight lbs (kg)	300 (136)	500 (226)	55 (25)
Probe Positioner Drive	115 V dc variable speed		
Recommended Control Unit	Model 4139		

Ordering Information

Refer to the specification table when ordering. Please note that a position controller is ordered separately.

Options

(-)-1 Model 56040 Probe Rotator installed

Accessories

Model 4139 Position Controller
 Model 4131 Position Controller
 Model 2012 Positioner Programmer
 Model 4181 Position Controller
 Mating Connector Kit for Model 59510 or 59511 – P/N 221366
 Mating Connector Kit for Optional Probe Rotator – P/N 221313