

Field Probe & Monitoring Equipment

High Sensitivity, High Fields, Broad Bandwidths

RF field probes are a required piece of test equipment used for measuring the intensity of radiated RF fields. The use of a field probe may seem straightforward; however, there are numerous aspects of using field probes that can affect the accuracy of RF measurements. Probe mounting, positioning, orientation, and sources of additional field contributions should be considered when making field measurements. Understanding these factors is important to allow achieving the best accuracy in field measurements.



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The FL8000 Series field probes offer a three-in-one solution capable of measuring continuous-wave, pulsed, and modulated electric fields. Covering 5 kHz - 60 GHz, the FL8000 Series works great in commercial, automotive, military, and aviation applications. Each field probe is an electrically small, separable axis sensor capable of measuring both continuous wave and pulsed electric fields offering a unique bandwidth, sensitivity, and dynamic range. Functionality that historically necessitated several types of field probes is now encompassed in a single product.



Laser-Powered Electric Field Probe Kits

This series offers exceptional linearity and dynamic range performance to enable the accuracy required for even the most demanding testing. With fiber power connectivity, the FL8000 Series provides an easy migration path, all while delivering the reliability that has made AR the world leader in field monitoring.

The Field Probe kits contain a laser probe interface and everything needed to operate its associated Field Probe.

Model

FL8200/Kit
 FL8009/Kit
 FL8018/Kit
 FL8040/Kit
 FL8060/Kit

Description

Laser-Powered Electric Field Probe Kit, 5 kHz - 200 MHz, 0.3 - 500 V/m, CW & Pulse
 Laser-Powered Electric Field Probe Kit, 20 MHz - 9.3 GHz, 0.5 - 800 V/m, CW & Pulse
 Laser-Powered Electric Field Probe Kit, 20 MHz - 18 GHz, 1000 V/m, CW & Pulse
 Laser-Powered Electric Field Probe Kit, 20 MHz - 40 GHz, 1000 V/m, CW & Pulse
 Laser-Powered Electric Field Probe Kit, 20 MHz - 60 GHz, 1000 V/m, CW & Pulse



Laser Probe Interface

The FI8000 interface provides both power to and communication with the FL8000 series probes. A low-level loop back fiber optic connection is used to sense unexpected disconnect of laser driven fibers to ensure user-safe operation. As an additional safety measure, shuttered connectors are used on all fiber optic connections to and from the probe.

The FI8000 can be used with the FM7004A Field Monitor (using the provided 0.5-meter fiber optic cable) or a PC by direct communication using the IEEE-488 (GPIB), Ethernet, USB 2.0, RS-232 or Fiber-Optic Serial interfaces.

Model	Description	
FI8000	Wavelength	808 nm
	Maximum Output Power	2000 mW
	Class	1
	Shutdown Time	< 1 ms after fiber disconnect < 250 ms after loss of communication



Field Monitoring

Model FM7004A is an E-field control center that offers monitoring, display, and alarm capabilities for immunity-test environments. Exceptionally precise with auto-recognition to adapt to laser powered probes. The FM7004A is self-calibrating and is programmed to be self-correcting. The unit allows field-strength measurement at up to four probe locations simultaneously with results displayed on a backlit color LCD. Choose from any field probe with sensitivity from 0.4 to 1000 V/m, 0.012 - 17 A/m, and frequency response from 5 kHz to 60 GHz.

Up to 4 tables of correction factors containing up to 30 different frequency points can be stored in the FM7004A. From the menu-controlled front panel, call up composite field readings from E-field probes, including a laser powered E-field probe, or choose readings from each axis of a three-axis probe.

The FM7004A field monitor provides four digital interfaces (USB, GPIB, RS-232 and Ethernet) and a highly readable, user-configurable, graphic, liquid crystal display. Menu options are at your disposal. Communication from the chamber to the FM7004A is through fiber optic cables.

Model

FM7004A

Description

Versatile field monitoring system for performing all measurement display and control functions for the field related testing.



Field Monitoring & Laser Powered Probe Packages

The MP Series of Field Monitoring Packages are combinations of AR Field Monitors and Field Probe Kits. Each package contains all the necessary equipment to make Field measurements.

Model	Description
MP00200	FM7004A (field monitor) and FL8200/Kit (laser-powered electric field probe) package
MP09000	FM7004A (field monitor) and FL8009/Kit (laser-powered electric field probe) package
MP09001	FM7004A (field monitor), FL8200/Kit and FL8009/Kit (laser-powered electric field probe) package
MP09002	FM7004A (field monitor) and two FL8009/Kits (laser-powered electric field probe) package
MP09004	FM7004A (field monitor) and four FL8009/Kits (laser-powered electric field probe) package
MP18000C	FM7004A (field monitor), FL8200/Kit and FL8018/Kit (laser-powered electric field probe) package
MP18001C	FM7004A (field monitor) and FL8018/Kit (laser-powered electric field probe) package
MP18003B	FM7004A (field monitor), FL8200/Kit, FL8009/Kit, and FL8018/Kit (laser-powered electric field probe) package
MP40000B	FM7004A (field monitor), FL8200/Kit and FL8040/Kit (laser-powered electric field probe) package
MP40001B	FM7004A (field monitor) and FL8040/Kit (laser-powered electric field probe) package
MP60000C	FM7004A (field monitor), FL8200/Kit, and FL8060/Kit (laser-powered electric field probe) package



AR Field Probes & Monitoring Equipment with a Peace of Mind

From automotive and commercial to military and aviation applications, EMC testing in a lab often requires measuring different types of electric fields that can necessitate multiple field probes. These probes are designed specifically to help customers meet industry standards and simplify their setup; the FL8000 Series field probes offer a three-in-one solution capable of measuring continuous-wave, pulsed, and modulated electric fields. Visit our website arworld.us to learn more or contact us via email at info@arworld.us or call us at 215.723.8181.





Visit our website to learn more about our additional Total Solutions offerings:

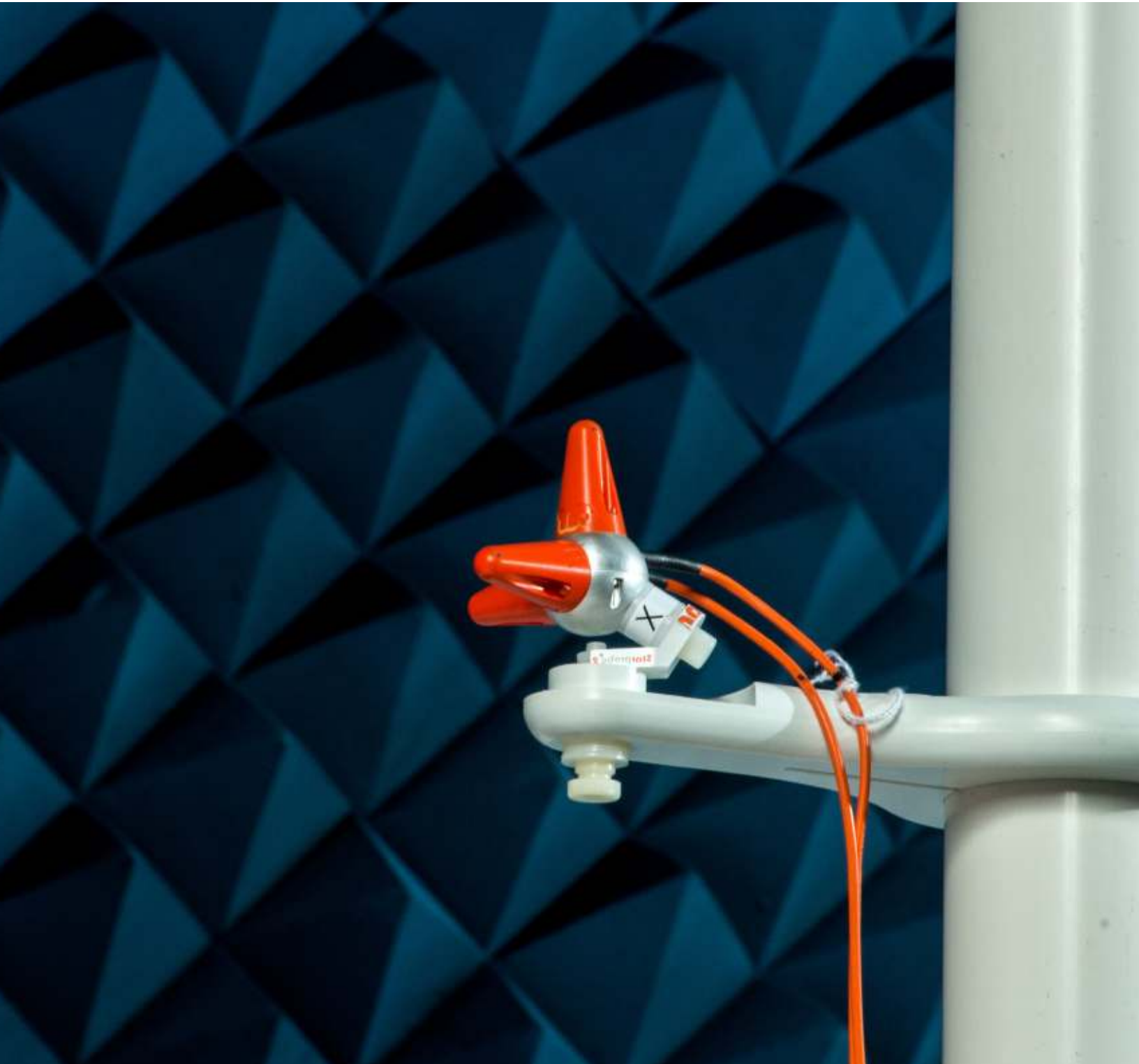
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We're with you all the way



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