

# EMF Probes EMF Field Probe Model HI-6122

## FEATURES:

- Frequency Range: 10 kHz 1 GHz
- Dynamic Range 2.0 to 800 V/m (Single Range)
- Reads/Displays Individual and Summed Axis Values
- A2LA Calibration Standard
- Suitable for Commercial Specs:
  -- EN/IEC61000-4-3 Radiated Immunity
- Suitable for MIL Standard Specs:
  MIL-STD 431E Radiated Susceptibility (RS)
- Suitable for Automotive Specs:
  - -- SAE J1113/27
  - -- GM9120P
  - -- GM93100GS
  - -- GM9114P

### **ETS-Lindgren's HI-6122 EMF Field**

**Probe** provides broadband EMF frequency coverage and wide dynamic range that satisfies the demands of most test requirements. To take advantage of this capability, the HI-6122 was designed to be single range reading so data can be read continuously over the entire dynamic range. Data values for each axis (X, Y, Z) can be read individually or summed.

### DESCRIPTION

The isotropic deviation (isotropy) of the HI-6122 is near ideal at +/-0.5 dB. This means the HI-6122 makes accurate field intensity measurements regardless of its orientation to the field of interest. Fiber optic signal and power lines link from the Model HI-6122 to either the optional HI-6100 or direct connect to a PC with the HI-6113 Laser Data Interface and Probe-View Laser software.

The HI-6100 monitor provides manual functions and programmed control via IEEE-488 and RS-232 Serial Interfaces. Readings of up to four probes can be displayed simultaneously, and can be any combination of battery or laser powered probes currently available from ETS-Lindgren.

The HI-6113 Laser Data Interface provides the laser power and the communications for the HI-6122 Electric Field probe. A USB port to the PC allows for quick and easy data collection, using ProbeView Laser software.



ETS-Lindgren's Model HI-6122 EMF Field Probe

### FEATURES

With a frequency range of 10 kHz -1 GHz, the HI-6122 is a broadband EMF probe that meets all radiated RF immunity test requirements which start at 10 kHz.

An improved dynamic range over the original units of up to 800 V/m is better suited for the higher field withstand requirements demanded by military and automotive test standards.

For greater flexibility and test result analysis, the HI-6122 allows for data values to be read from each individual axis or as the total isotropic field value.

The probe is supplied with its complete A2LA calibration data and calibration certificate.



# **EMF** Probes **EMF Field Probe**

Model HI-6122

### **APPLICATIONS**

- Suitable for Commercial Specs: -- EN/IEC61000-4-3
  - **Radiated Immunity**
- Suitable for MIL Standard Specs: -- MIL-STD 431E Radiated Susceptibility (RS)
  - Owner's Manual
    - A2LA Standard Calibration

**STANDARD CONFIGURATION** 

Laser Data Module

Carrying Case

10 m Fiber Optic Cable

## • Suitable for Automotive Specs:

- -- SAE J1113/27
- -- GM9120P
- -- GM93100GS
- -- GM9114P



H-491269 Probe Stand



Model HI-6122 Typical Frequency Response



Model HI-6122 Typical Isotropic Response

## **Electrical Specifications**

MODEL #	FREQUENCY Range	FREQUENCY Response	DYNAMIC Range	RESOLUTION	<b>ISOTROPIC</b> Deviation	LINEARITY	SAMPLE Rate	<b>OVERLOAD</b> Withstand
HI-6122	10 kHz - 1 GHz	10 kHz to 30 kHz -2.5/+0.5 dB 30 kHz - 1 GHz +/- 1 dB (typical)	2.0 to 800 V/m (Single Range)	0.01 V/m	+/- 0.5 dB	+/- 0.5 dB of Reading	> 70 Samples second max.	> 1500 V/m CW

# **Physical Specifications**

PHYSICAL INTERFACE	OPERATING TEMP. RANGE	DIMENSIONS	WEIGHT	MOUNTING
Duplex Optical Fiber	10 to 40° C	32 mm x 32 mm x 32 mm Housing	80 g	1/4" 20
(62.5 micron multimode)		(1.25 in. x 1.25 in. x 1.25 in.)		UNC Internal Thread
FC Connectors for Laser, ST Connector for Transmitter		43 mm (1.69 in) Sensor Protection Caps		