

ELECTRIC FIELD PROBES HI-6023 Electric Field Probe with Field-Replaceable Battery

ETS-Lindgren's HI-6023 Electric Field Probe with Field-Replaceable Battery has a Frequency Response of 10 kHz to 1 GHz.



ETS-Lindgren's Model HI-6023 RF Field Probe is a fully intelligent sensor enabling fast and accurate EMF measurements with industry-leading performance specifications. Optical coupling to a variety of readout options makes this probe ideally suited for a wide range of field monitoring applications.

Designed to be single range reading, the HI-6023 can read data continuously over the entire dynamic range. Data values for each axis (X, Y, and Z) can be read individually or summed.

A unique feature of the HI-6023 is the field-replaceable battery. This battery allows the user to replace the battery when necessary, without requiring additional calibration. Simple in-field synchronization of the HI-6023 is all that is required for proper battery level monitoring.

The HI-6100 provides manual functions and programmed control via IEEE-488 and RS-232 Serial Data Interfaces. Readings from up to four field probes can be displayed simultaneously.

The EMCenter™ Modular RF Platform along with the EMSense™ interface card can be used with the HI-6000 series field probes as a field monitor in addition to its capability as a system level platform.

For direct connection to a PC, either the HI-4413P Serial or the HI-4413USB interfaces are available.

Key Features

- Frequency Response: 10 kHz to 1 GHz
- Dynamic Range: 2.0 to 800 V/m
- Provides Individual and Summed Axis Values
- A2LA Accredited Calibration Report
- Suitable for MIL Standard Specs:
 - MIL-STD 461F Radiated Susceptibility (RS)
- Suitable for Automotive Specs¹:
 - SAE J1113/27
 - GMW 3091/3097/3103
- Suitable for Commercial Specs:
 - EN/IEC61000-4-3 Radiated Immunity
- Operates with Most 3rd Party Immunity Software

¹ For High Field and High Frequency Requirements, the HI-6053 is Recommended

Electrical Specifications

Detection: Isotropic (X, Y and Z Axis Readings)

Frequency Range: 10 kHz to 1 GHz

Frequency Response:

- 10 kHz to 30 kHz +0.5, -2.5 dB
- 30 kHz to 1 GHz \pm 1.0 dB

Frequency Response with Correction: 10 kHz to 1.0 GHz \pm 0.9 dB

Dynamic Range: 2 to 800 V/m (Single Range)

Resolution: 0.01 V/m

Isotropic Deviation: \pm 0.5 dB @ 400 MHz

Linearity: \pm 0.5 dB (2-800 V/m)

Sample Rate (Typical): 70 Samples/Second Maximum

Overload Withstand: >1500 V/m CW

Physical Specifications

Physical Interface: Duplex Optical Fiber (200 Micron Multimode); FSMA Connectors. Integral 1m Optical Cable

Battery: 4.8 V NiMH, up to 8 Hours of operation

Battery Charger: 100-240 VAC Universal Input; 3-Hour Charge from Full Depletion

Cubical Housing Height: 32 mm (1.26 in)

Sensor Protection Caps Height: 32 mm (1.25 in)

Weight: 80 g (2.82 oz)

Mounting: 1/4" 20 - UNC Internal Thread

Other Specifications

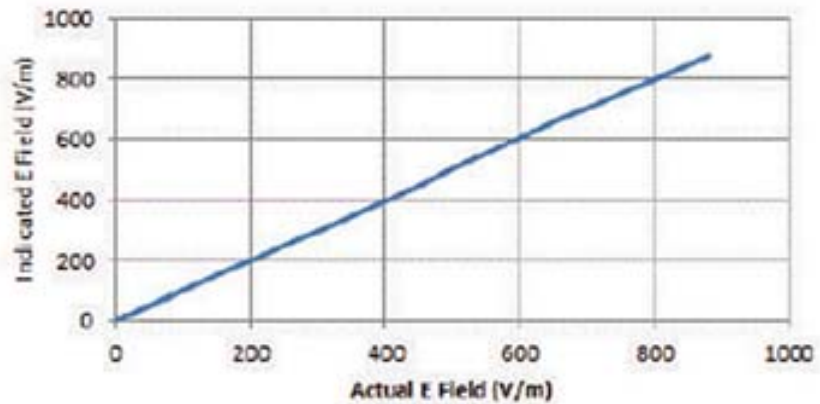
- HI-6023 Probe
- A2LA Traceable Calibration Report
- Carrying Case
- Bulkhead Connector (2)
- Fast Battery Charger/Battery Synchronizer
- 10 m Optical Cable
- Spare Screws for Battery Hatch
- Manual

Product Charts

Typical HI-6023 Isotropic Deviation Data Recorded at 400 MHz - Field Level 20 V/m



Linearity Response at 27 MHz



Typical Frequency Response with Limits

