

ELECTRIC FIELD PROBES HI-6006 Electric Field Probe with Field-Replaceable Battery

ETS-Lindgren's HI-6006 Electric Field Probe has a Frequency Response of 100 kHz to 6 GHz.



ETS-Lindgren's Model HI-6006 Electric 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-6006 RF field probe 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-6006 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-6006 is all that is required for proper battery level monitoring.

The HI-6100 Field Monitor 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: 100 kHz to 6 GHz
- Dynamic Range: 0.5 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
 - FORD FMC 1278
- Suitable for Commercial Specs:
 - EN/IEC61000-4-3 Radiated Immunity

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

Specifications

Electrical Specifications

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

Frequency Range: 100 kHz to 6 GHz

Frequency Response: (Typical)

- 500 kHz to 2 GHz +1.0, -2.5 dB
- 2 to 5.5 GHz +3.5, -4.5 dB
- 5.5 to 6 GHz +2.0, -6.0 dB

Frequency Response with Correction: 100 kHz to 6 GHz \pm 0.9 dB

Dynamic Range: 0.5 to 800 V/m (Single Range)

Resolution: 0.01 V/m

Isotropic Deviation: \pm 0.5 dB @ 400 MHz

Linearity: \pm 0.5 dB (1 to 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: 43 mm (1.69 in)

Weight: 80 g (2.82 oz)

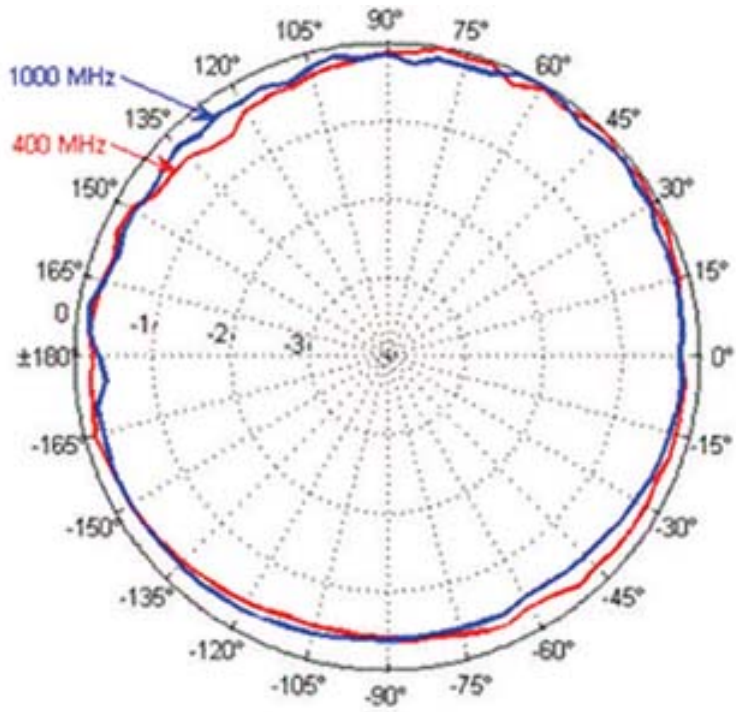
Mounting: 1/4" 20 - UNC Internal Thread

Other Specifications

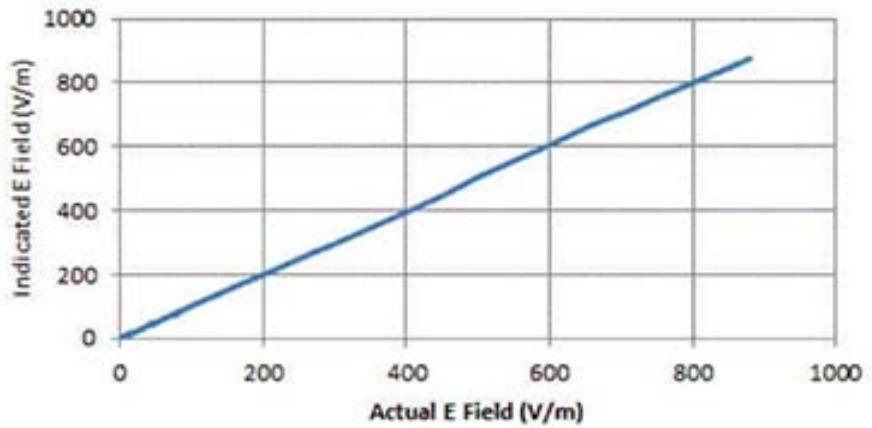
- HI-6006 Probe
- A2LA Traceable Calibration Report
- Carrying Case
- Bulkhead Connector (2)
- Fast Battery Charger/Battery Synchronizer
- 10 m Optical Cable
- Spare Screws for Battery Hatch
- Manual

Product Charts

Isotropic Deviation
Actual Data Taken at
400 MHz
Field Level 20 V/m
Maximum Variation
0.54 dB



Linearity Response
at 27 MHz



Frequency Response
Anechoic Room and
TEM Cell Setups -
Field Level 20 V/m

