

HI-6053 Electric Field Probe with Field-Replaceable Battery

ETS-Lindgren model HI-6053 is a battery-operated electric field probe with a frequency range of 10 MHz to 40 GHz.



Key Features

Frequency Range: 10 MHz to 40 GHz

Individual and Summed Axis Values

Dynamic Range: 2.0 to 800 V/m (Single Range)

User Replaceable/Rechargeable Batteries

A2LA Accredited Calibration Report

Suitable for MIL Standard Specs:

MIL-STD 461F Radiated Susceptibility (RS)

Suitable for Automotive Specs:

SAE J1113/27

GM W 3091/3097/3101

FORD FMC1278

Operates with Most 3rd Party Immunity Software

ETS-Lindgren's Model HI-6053 is a battery-operated electric field probe that provides broadband frequency coverage and wide dynamic range that satisfies the demands of most test requirements. To take advantage of this capability, the HI-6053 RF field probe 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, and Z) can be read individually or summed. ETS-Lindgren's HI-6053 Electric Field Probe is a fully intelligent sensor enabling fast and accurate electric field 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.

This field probe incorporates user replaceable/rechargeable batteries.

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.

Specifications

View the HI-6053 Electric Field Probe with Field-Replaceable Battery technical specifications below

Physical Specifications

Physical Interface: FSMA Connectors; Duplex Optical Fiber (200 Micron Multimode)

Battery: (4) Rechargeable NiMH AAA

Operating Temperature Range: 10 to 40 C (50 to 104 F); 5 to 95% Relative Humidity Non-condensing

Battery Life: >30 Hours Continuous

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

Weight: 0.36 kg (12.64 oz)

Dimensions (L x W): 43.8 cm x 5.7 cm (17.24 in x 2.24 in)

Mounting: 1/4" - 20 UNC Internal Thread

Electrical Specifications

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

Frequency Response with Correction:

- 10 MHz to 18 GHz 0.9 dB
- 18 to 40 GHz 1.1 dB

Frequency Range: 10 MHz to 40 GHz

Frequency Response:

- 10 to 100 MHz + 3.0, -4.0 dB
- 100 MHz to 1 GHz +3.0, -0.50 dB
- 1 to 18 GHz +4.0, -2.0 dB
- 18 to 40 GHz +3.5, -4.5 dB

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

Resolution: 0.01 V/m

Isotropic Deviation: 1.0 dB < 18 GHz

Linearity: 0.5 dB

Sample Rate (Typical): 70 Samples per Second Maximum

Overload Withstand: >1500 V/m CW

Product Options

Optical Cable Extensions (H-491106-xx)

Probe Stand Assembly (H-491269)

Extra Probe Carriers for Above Probe Stand (H-491276)

EMCenter Interface Card (125446)

HI-4413USB Fiber to USB Interface

Product Configuration

A2LA Traceable Calibration Report

Carrying Case

Owners Manual

Bulkhead Connector (2)

Fast Battery Charger

Probe Assembly

10m Fiber Optic Cable

Charts

View the [HI-6053 Electric Field Probe with Field-Replaceable Battery](#) charts below