

## EMSENSE™ 10

ETS-Lindgren's EMSense 10 Electric Field Probe measures field strength from 10 kHz to 10 GHz with a dynamic range of 1 to 750 V/m.



ETS-Lindgren's laser-powered EMSense™ 10 Electric Field Probe embodies the latest innovations in isotropic sensor design, low noise and miniaturized electronics. Designed to be single range reading, the EMSense™ 10 can read data continuously over the entire dynamic range. Data values for each axis (X, Y, and Z) can be read individually or summed. Fiber optic signal and power lines link the RF field probe to either the EMCenter™ 2/7 Slot, or as a direct connect to a PC USB port with the EMCenter™ 1-Slot.

The EMCenter™ 2 and 7 Slot Modular RF Platform along with the EMSense™ 10 interface card can be used as a Field Monitor in addition to its capability as a system level platform.

The EMCenter™ 1-Slot with the EMSense™ 10 interface card provide laser power and communications for the EMSense™ 10 Field Probe. A USB connection to the PC allows for quick and easy data collection, using Laser Probes software.

To be used in place of the HI-6105 and HI-6122.

## Key Features

- Laser powered for extended testing
- Frequency corrected field values direct from probe
  - No need to apply correction factors
- Single probe frequency range - 10 kHz to 10 GHz
- Broad dynamic range - 1 to 750 V/m
- Small physical size
- Six axis spherical design
- A2LA Accredited Calibration
- Suitable for MIL Standard Specs:
  - MIL-STD 461F Radiated Susceptibility (RS)
- Suitable for Automotive Specs:
  - SAE J1113/27GMW 3091/3097/3103
  - GMW 3091/3097/3103
  - FORD FMC 1278
- Suitable for Commercial Specs: EN/IEC 61000-4-3 Radiated Immunity
- To be used in place of the HI-6105 and HI-6122.

## Features

The EMSense 10 probe utilizes an updated CPU in the EMCenter to support its improved communication speed. Some EMCenter units carry an older CPU that must be upgraded to support the EMSense 10 probe and plug-in card. To check compatibility, access the "? Info" menu on the EMCenter main screen and check slot 8. The compatible processor is 7000-008. If the EMCenter shows processor 7000-007, a processor upgrade is available through the ETS-Lindgren service center.

Alternatively, a stand-alone EMCenter is available for EMSense 10 that appears as an additional EMCenter slot to EMC control software.

# Specifications

## Electrical Specifications

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Dynamic Range
Damage Level
Frequency Range
Frequency Response (with internal correction)
Resolution
Linearity
Isotropic Deviation
Measurement speed (Sensor)

## Physical Specifications

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Shape of housing
Weight
Total electrical dimensions
Diameter of Spherical housing
Temperature range (operating)
Relative humidity (operating)
Factory calibration
Optical LASER power
F.O. connector LASER
F.O. connector DATA
Fiber Extension length *
* Sold separately. Standard lengths are 10, 20 and 30 meters.

## Additional Specifications

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- Electric Field Probe
- Set of in-line connectors (FC, ST)
- 10m Fiber Cable\*
- Probe Stand
- Carry Case
- Fiber Cleaning wipes

\*The probe is delivered with 2.5 meter fixed fiber cable with a set of in-line connectors. Standard fiber extension cable lengths of 10, 20 and 30 meters can be purchased. A maximum of two in-line connections is suggested.

## Product Options

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**Kits:\***

**For EMCenter 2-Slot and 7-Slot (EMCenter sold separately).**

1714963: 7007-201 10M kit, Probe+Card+10m Fiber Cable

1714964: 7007-201 20M kit, Probe+Card+20m Fiber Cable

**For EMCenter 1-Slot (for connection to a PC).**

1714959: 7007-201 10M kit, Probe+Card+1-Slot+10m Fiber Cable

1714961: 7007-201 20M kit, Probe+Card+1-Slot+20m Fiber Cable

\*Individual parts can be sold separately