# **SPECIFICATIONS**

# **Standard Configuration**

- · Model HI-2200 Metering Unit
  - 1/4 X 20 Tripod Mount
  - Handgrip Strap
  - · Shoulder Harness
  - RS-232 Data Interface Cable (9-pin D-sub connector)
  - Data Upload Software
  - User Manual
  - Fitted Carry Case
- · Calibration
- · Two Year Warranty



Shown with optional probe

### **Options**

- · E & H Field Probes
- Optical Remote Data Link Kit (allows remote reading and data collection)
- Optical Cable (up to 200 meters)
- Probe View II PC Software

# **Electrical Specifications**

	Model Number	Sensor Detection Type	Frequency Range	Dynamic Range
	C300	E-Field % of FCC std (total field indication)	100 kHz - 8 GHz	< 1% - 999% of FCC std
	C310	E-Field % of ICNIRP std (total field indication)	100 kHz - 8 GHz	< 1% - 999% of ICNIRP
	H200	H-Field isotropic (total field indication)	5 MHz - 300 MHz	30 mA/m - 10 A/m (single range)
	H210	H-Field isotropic (total field indication)	300 kHz - 30 MHz	0.3 - 30 A/m (single range)
\	E100	E-Field isotropic (total field indication)	100 kHz - 5 GHz	0.3 - 800 V/m (single range)

# **About ETS-Lindgren**

ETS-Lindgren is the proven world leader for components and systems that measure, shield and control electromagnetic and acoustic energy. We provide solutions for EMI/RFI/EMF test and measurement applications as well as medical, industrial and governmental RF shielding requirements. Our product line ranges from simple benchtop diagnostic tools to fully integrated turnkey facilities.

Recently ETS-Lindgren acquired Holaday Industries and their entire line of quality EMF measurement instruments and calibration services. Holaday products are now manufactured by ETS-Lindgren, and Holaday's calibration services have been added to our own broadening service capabilities.

As part of ESCO Technologies Corporation, ETS-Lindgren has the financial strength to meet our commitments, both today and tomorrow. A leading supplier of engineered products for growing industrial and commercial markets, ESCO is a New York Stock Exchange listed company (symbol ESE) with headquarters in St. Louis, Missouri with headquarters in St. Louis, Missouri.

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# EMF SAFETY MEASUREMENT SYSTEMS RF RADIATION SURVEY & MONITORING SYSTEMS

**MODEL HI-2200** 

# **Designed for:**

- FCC & ICNIRP Measurements
- RF Radiation Source Surveys
- RF Exposure Level Monitoring



**Applications:** 

- Broadcast/Telecom
- Wireless
- Industrial
- Medical
- Military



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Information presented is subject to change as product enhancements are made Contact the ETS-Lindgren Sales Department for current specifications.



Our surrounding environment is charged with invisible electromagnetic energy. The electric and electronic devices that make modern life possible are the sources for this energy sometimes called electrosmog. In most cases, the energy levels from these sources are not a threat to human health. However some sources can generate RF and microwave energy that may be hazardous.

# **Examples of sources are:**

- · Broadcast and communication transmitters
- · Radar transmitters
- · RF Power amplifiers
- · Industrial heat sealers & welders
- · Induction heaters
- · Microwave dryers
- · Semiconductor processing equipment
- · Plasma generators

Standards developed by the IEEE<sup>1</sup> and ICNIRP<sup>2</sup> are used for determining safe exposure levels to electromagnetic fields. In the United States, the FCC and OSHA enforce these safety standards. Violations for exceeding safe levels of exposure can result in fines.

To help identify, survey and monitor radiation sources and exposure levels in your environment, ETS-Lindgren offers the HI-2200, a hand-held RF survey and monitoring system that's easy to use and inexpensive to own. The HI-2200 provides easy to understand results so you can take action quickly.



<sup>1</sup>International Electrical and Electronics Engineers <sup>2</sup>International Commission on Non-Ionizing Radiation Protection



Model HI-2200 Metering Unit: This hand-held metering unit contains the processor and readout display for the system's selection of easily connected, interchangeable field probes. The menu driven display has user-selectable readout units and a wide range of field averaging and display options. Up to 65K data points can be logged and uploaded with the built-in RS-232 interface. Four AA alkaline batteries provide a reliable and readily available power source.



Model H200 Magnetic Field Probe: Use this probe for measuring magnetic fields across a 5 MHz to 300 MHz frequency range. RF exposure standards recommend measurement of both E and H field components at frequencies below 300 MHz. The H200 is useful for applications such as measurements at FM broadcast installations.



Model C300 Conformal (Shaped) Electric Field Probe: Use this probe for measuring compliance with US FCC

exposure limits. The Model C300 is a conformal or shaped probe that measures exposure levels from multiple RF sources at once and displays the combined result as a percent of the allowed limit. Frequency range is 100 kHz to 8 GHz.



**Model H210 Magnetic Field Probe:** Use this probe to measure magnetic fields across a 300 kHz to 30 MHz frequency range. The H210 is useful for applications such as measurements at AM broadcast installations.



Model C310 Conformal (Shaped) Electric Field Probe:

Use this probe for measuring compliance with ICNIRP exposure limits. The Model C310 is a conformal or shaped probe that measures exposure levels from multiple RF sources at once and displays the combined result as a percent of the allowed limit. Frequency range is 100 kHz to 8 GHz.



**Model E100 Electric Field Probe:** Use this probe for measuring electric fields across a 100 kHz to 5 GHz frequency range.