

## FIELD PROBE MONITORS EMSense™ EMF Probe Plug-in Card Model 7007-001

ETS-Lindgren EMSense™ EMF Probe Plug-in Card provides an interface for ETS-Lindgren's battery-powered E-field probes to the EMCenter Modular RF Platform.



ETS-Lindgren EMSense EMF Probe Plug-in Card provides an interface for ETS-Lindgren's battery-powered electrical field probes to the EMCenter Modular RF Platform.

Each EMSense Modular Plug-in Card supports one ETS-Lindgren electrical field probe. EMSense and ETS-Lindgren EMC field probes are fully supported by TILE™ and other test automation software packages. Please contact ETS-Lindgren for additional information.

### Key Features

- Provides an Interface for ETS-Lindgren Battery-Powered Electrical Field Probes
- Wide Frequency and Dynamic Ranges
- Compact Design

### Features

#### Wide Frequency and Dynamic Ranges

EMSense is fully compatible with all ETS-Lindgren EMC battery-powered electric field probes, covering a frequency range of 10 kHz to 40 GHz and a dynamic range of 0.5 to 800 V/m.

#### Compact Design

Each EMSense plug-in card occupies one slot in the EMCenter platform, allowing additional slots to be occupied by modular plug-in cards for positioning controllers, multiple RF switches and more.

## Specifications

### Electrical Specifications

Specification	HI-6023 (Optional E-field Probe)	HI-6006 (Optional E-field Probe)	HI-6053 (Optional E-field Probe)
Detection	Isotropic (X, Y and Z Axis Readings)	Isotropic (X, Y and Z Axis Readings)	Isotropic (X, Y and Z Axis Readings)
Calibrated Frequency Range	10 kHz to 1 GHz	100 kHz to 6 GHz	10 MHz to 40 GHz
Frequency Response (Typical)	10 kHz to 30 kHz +0.5, - 2.5 dB 30 kHz to 1 GHz ± 1.0 dB	500 kHz to 2 GHz +1.0, -2.5 dB 2 to 5 GHz +3.5, -4.0 dB 5 to 6 GHz +1.0, -6.0 dB	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 +3.0, -4.5 dB
Frequency Response with Correction	± 0.9 dB	± 0.9 dB	10 MHz to 18 GHz ±0.9 dB 18 to 40 GHz ±1.1 dB
Dynamic Range	2.0 to 800 V/m (Single Range)	0.5 to 800 V/m (Single Range)	2.0 to 800 V/m (Single Range)
Resolution	0.01 V/m	0.01 V/m	0.01 V/m
Isotropic Deviation	±0.5 dB @ 400 MHz	±0.5 dB @ 400 MHz	±1.0 dB <18 GHz
Linearity	±0.5 dB @ 27 MHz	±0.5 dB @ 27 MHz	±0.5 dB @ 1 GHz
Sample Rate	60 Samples/Second Maximum	60 Samples/Second Maximum	60 Samples/Second Maximum
Overload Withstand	>1500 V/m CW	>1500 V/m CW	>1500 V/m CW

## Physical Specifications

Specification	7007-001 (Plug-in Card)	HI-6023 (Optional E- field Probe)	HI-6006 (Optional E- field Probe)	HI-6053 (Optional E- field Probe)
Exterior Dimension	1 Slot	32 mm x 32 mm Housing (1.25 in x 1.25 in x 1.25 in)	32 mm x 32 mm Housing (1.25 in x 1.25 in x 1.25 in)	76 mm x 51 mm x 51 mm  Housing (3.0 in x 2.0 in x 2.0 in)
Sensor Protective Caps Height	n/a	36 mm (1.42 in)	43 mm (1.69 in)	348 mm x 58.4 mm (13.7 in probe length x 2.3 in width)
Weight	n/a	80 g (2.82 oz)	80 g (2.82 oz)	360 g (12.7 oz)
Mounting	n/a	1/4" 20 - UC Internal Thread	1/4" 20 - UC Internal Thread	1/4" 20 - UC Internal Thread
Physical Interface	n/a	Duplex Optical Fiber (200 Micron Multi-mode) FSMA Connectors Integral 1m Optical Cable	Duplex Optical Fiber (200 Micron Multi-mode) FSMA Connectors Integral 1m Optical Cable	Duplex Optical Fiber (200 Micron Multi-mode) FSMA Connectors
Temperature Range	0° C to +35° C (32°F to +95°F)	+10° to +40° C (+50°F to +95°F)	+10° to +40° C (+50°F to +95°F)	+10° to +40° C (+50°F to +95°F)
Relative Humidity	10 to 90% (Non-condensing)	5 to 95% (Non-condensing)	5 to 95% (Non-condensing)	5 to 95% (Non-condensing)
Battery (Field replaceable)	n/a	Rechargeable NiMH	Rechargeable NiMH	Rechargeable NiMH AAA 900mA/hr
Battery Life	n/a	8 Hours	8 Hours	30 Hours

Battery Charger	n/a	100 - 240 VAC Universal Input 3-Hour Charge from Full Depletion	100 - 240 VAC Universal Input 3-Hour Charge from Full Depletion	100 - 240 VAC Universal Input 3-Hour Charge from Full Depletion
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## Other Specifications

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- EMSense EMF Probe Plug-in Card
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