# **RF TEST SOLUTIONS** EMSENSE™ EMF PROBE PLUG-IN CARD



# ETS-Lindgren's EMSense EMF Probe

**Plug-In Card** provides an interface for ETS-Lindgren's laser-powered E-Field probes. Each EMSense plug-in card supports one ETS-Lindgren E-Field probe.

EMSense and ETS-Lindgren probes are fully supported by TILE<sup>TM</sup> and other test automation software packages. Please contact ETS-Lindgren for additional information.

# Wide Frequency and Dynamic Ranges

EMSense is fully compatible with all ETS-Lindgren E-Field laser 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.

Please contact ETS-Lindgren for further information.

Standard Configuration

EMSense EMF Probe Plug-in Card

#### **Options**

- EMCenter Modular RF Platform (Model 7000-001, required for operation)
- EMCenter 7-Slot RF System + IEEE-488 (GPIB) (Model 7000-010)
- ETS-Lindgren Laser-powered E-Field Probes

#### **MODELS 7007-002**

- Provides Interface for ETS-Lindgren Laserpowered E-Field Probes
- Wide Frequency and Dynamic Ranges
- Compact Design



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# **Technical Specifications**

Physical Specifications	7002-002 (Plug-in Card)	HI-6122 (Optional E-Field Probe)	HI-6105 (Optional E-Field Probe)	HI-6153 (Optional E-Field Probe)
Exterior Dimension	1 Slot	32 mm x 32 mm x 32 mm Housing	32 mm x 32 mm x 32 mm Housing	32 mm x 32 mm x 32 mm Housing
		1.25 in x 1.25 in x 1.25 in	1.25 in x 1.25 in x 1.25 in	1.25 in x 1.25 in x 1.25 in
Sensor Protective Caps Height	n/a	43 mm	43 mm	n/a
		1.69 in	1.69 in	1.69 in
Weight	n/a	80 g	80 g	380 g
		2.82 oz	2.82 oz	2.82 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	10°C to +40°C	10°C to +40°C	10°C to +40°C
	32ºF to +95ºF	50°F to +104°F	50°F to +104°F	50°F to +104°F
Relative Humidity	10 to 90% (Non-condensing)	5 to 95% (Non-condensing)	5 to 95% (Non-condensing)	5 to 95% (Non-condensing)
Power		Laser-powered	Laser-powered	Laser-powered
Performance Specifications		HI-6122 (Optional E-Field Probe)	HI-6105 (Optional E-Field Probe)	HI-6153 (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	500 kHz to 2 GHz +1.0, -2.5 dB	10 MHz to 100 MHz +3.0, -4.0 dB
		30 kHz to 1 GHz, ±1.0 dB	2 GHz to 5 GHz +3.5, -4.0 dB	100 MHz to 1 GHz +3.0, -0.50 dB
			5 GHz to 6 GHz +1.0, -6.0 dB	1 GHz to 18 GHz +4.0, -2.0 dB
				18 GHz 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 GHz 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	±1.0 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		70 @ Samples/Second Maximum	70 @ Samples/Second Maximum	70 @ Samples/Second Maximum
Overload Withstand		>1500 V/m CW	>1500 V/m CW	>1500 V/m CW



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