ELECTRIC FIELD PROBES EMSense™ EMF Probe Plug-in Card Model 7007-002

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

Each EMSense Modular Plug-in Card supports one ETS-Lindgren E-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 Laser-Powered E-field Probes
- Wide Frequency and Dynamic Ranges
- Compact Design

Features

Wide Frequency and Dynamic Ranges

EMSense is fully compatible with all ETS-Lindgren EMC E-field laser-powered 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-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 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	7007-002 (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	Housing: 32 mm x 32 mm x 32 mm (1.25 in x 1.25 in x 1.25 in)	Housing: 32 mm x 32 mm x 32 mm (1.25 in x 1.25 in x 1.25 in)	Housing: 76 mm x 51 mm x 51 mm (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 Probe Length x 58.4 mm Probe Width (13.7 in x 2.3 in)
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 (62.5 micron multimode) FC for laser, Integral 1m optical cable	Duplex Optical Fiber (62.5 micron multimode) FC for laser, Integral 1m optical cable	Duplex Optical Fiber (62.5 micron multimode) FC for laser, Integral 1m optical cable
Temperature Range	0° C to +35° C (32°F to +95°F)	+10º to +40° C(+50°F to +95°F)	+10º to +40° C (+50°F to +95°F)	+10º 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)
Power (Provided by the 7007-002)	n/a	Laser Power	Laser Power	Laser Power

Other Specifications

- EMSense EMF Probe Plug-in Card