

PROBES & MONITERS EMSENSE™ PLATINUM



MODEL EMSENSE PLATINUM

- **Ultra-Fast Measurements**
- **Wide Frequency Coverage of 20 MHz to 18 GHz**
- **High Accuracy: ± 1 dB linearity, ± 0.5 dB anisotropy (below 1 GHz), and 0.01 V/m resolution.**
- **Laser-Powered Reliability: Immune to RF interference with up to 100 m fiber optic connection**

ETS-Lindgren's EMSense™ Platinum Laser-powered Electrical Field Probe is designed for applications where speed and accuracy are critical. This probe is ideal for demanding EMC and RF testing environments, especially where pulsed or rapidly changing fields are present, such as in radar pulse analysis and mode-stirred chambers. With its exceptionally fast performance—capable of up to 2 million full measurements per second and 6 million samples across all three axes—the EMSense Platinum delivers real-time insight into high-speed field variations. Unlike traditional probes that rely on buffered data, the Platinum Probe ensures every reading reflects the actual field strength at the exact moment it's requested, preventing data lag and enabling stable operation of automated test routines.

This probe offers a broad frequency range from 20 MHz to 18 GHz and supports a wide dynamic field strength measurement range from 2 to 1,000 V/m, with a maximum damage threshold of 1,500 V/m. High resolution down to 0.01 V/m and tight linearity specifications (± 1 dB ± 0.5 V/m) ensure accuracy across a wide range of applications. Its anisotropic performance is equally impressive, with deviations limited to ± 0.5 dB below 1 GHz and ± 2 dB up to 18 GHz. Built into a compact stalk-style housing, the EMSense Platinum contains three orthogonal dipole antennas and a 1 cm³ measurement volume, making it an ideal choice for both confined and open test environments.

Integration with ETS-Lindgren's modular EMCenter™ EM8 system is seamless, offering flexible configurations ranging from single-slot benchtop units to high-speed, multi-slot rackmount systems.

To maintain its measurement integrity over time, the probe is factory-calibrated in accordance with ISO/IEC 17025 standards, with all adjustment parameters—such as temperature compensation and linearity—stored internally. Additionally, users can upload custom frequency correction data for each axis directly into the probe memory, eliminating the need for manual software adjustments and enhancing usability across multiple setups.

PROBES & MONITERS EMSENSE™ PLATINUM

Technical Specifications

Electrical	
Frequency Range	20 MHz to 18 GHz
Frequency Response	-4 dB to +1.5 dB
Damage Level (Max.)	1500 V/m
Resolution	0.01 V/m
Field Measurement Range	2 to 1000 V/m
Anisotropy	± 0.5 dB (20 MHz - 1 GHz) ± 2 dB (1 GHz - 18 GHz)
Linearity	± 1 dB ± 0.5 V/m
Calibration	ISO/IEC 17025 Calibration
Optical	
Optical Laser Power	Max. 0.5W at Aperture
Laser Fiber Connectors	FC/PC
Optical Wavelength	808 nm
Extension Fibers	Maximum 100 m
Interlock	Hardware Interlock Connector
Data Fiber Connectors	FSMA
Fiber Disconnect Detection and Shutdown	Safe Under All Conditions
Physical	
Total Length Including Body	30 cm (11.81 in)
Number of Antennas	3 Dipoles
Electrical Measuring Volume	1 cm
Shape of Housing	Stalk Probe
Environmental Specifications	
Temperature range (Operating)	0 °C to 40 °C (32 °F to 104 °F)
Relative humidity (Operating)	10 % to 90 % RH (Non-Condensing)