



# FRANKONIA

EMC Test-Systems GmbH

# EFS-18

## ELECTRIC FIELD PROBES | DATASHEET

### Key Features:

- ✓ Triaxial isotropic sensor based on diode dipole
- ✓ Frequency range: 1 MHz ÷ 18 GHz
- ✓ 20 ms sampling rate
- ✓ Extremely small size
- ✓ Operation time > 50 hours with recharging time of 2.5 hours
- ✓ "EMC Viewer" software for system management
- ✓ Up to 8 sensors can be connected simultaneously





### TYPICAL APPLICATION

- ✚ Characterization of the electric field in TEM-GTEM cells and anechoic chambers
- ✚ Electromagnetic safety control and monitoring in laboratories and critical areas

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## DESCRIPTION

EFS-18 is new generation isotropic electric field sensor based on diode dipoles. The characteristics of bandwidth, sensitivity and speed make this sensor unique in their kind

EFS-18 sensor has been designed to be used in the characterization of the electric field in TEM, GTEM cells, in anechoic chamber and for monitoring applications of areas and critical points for electromagnetic safety.

The measurements are displayed in real time on a PC/Tablet thanks to the EMCViewer software, supplied with the probe.

The software shows the isotropic value, the single axes components, and the amplitude/time response of the electric field. The user can also export the resulting graphics and data for further processing. The EMCViewer software can manage and display up to 8 sensors simultaneously.

The exceptional autonomy of the device together with the fast-charging time allow the user to operate for more than 50 hours, and for 4 hours after having recharged the battery for only 20 minutes.



## TECHN. SPECIFICATIONS


### EFS-18


Sensor type	Triaxial isotropic
Data read	X, Y, Z and ISO
Bandwidth	1 MHz – 18 GHz
Amplitude frequency response	+/- 1,5 dB (10 MHz – 1 GHz)    +/- 3 dB (1 GHz – 16 GHz)
Sensitivity	0.8 V/m
Dynamic Range	0.8 – 340 V/m (52 dB)
Linearity @ 100 MHz	2 – 300 V/m 0.5 dB
Isotropy @ 100 MHz	0.5 dB
Temperature stability	0.5 dB in operating temp. range
Max sampling rate	50 sps
Operating temperature	5 °C – 45 °C with humidity 5% – 90% without condensation
Weight	100 g
Maximum size	Length 145 mm, Ø max 60 mm, min 32 mm
Recommended calibration interval	24 months



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