



# FIELD NOSE

## MEASURING SYSTEM FOR EMF

### MONITORING AND MEASURING OF ELECTROMAGNETIC FIELDS CAUSED BY RF-TRANSMITTERS

The EMF measurement system FIELD NOSE developed by Seibersdorf Laboratories permits accurate EMF measurements, monitoring of electromagnetic fields and statistical evaluation.

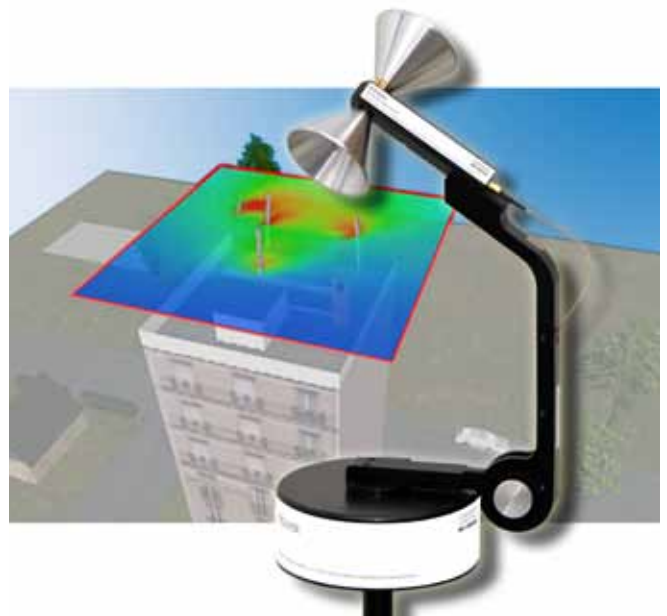
Three products are available in the FIELD NOSE family for covering various applications:

- **FIELD NOSE BASIC** is the modular system that can integrate existing test equipment;
- **FIELD NOSE COMPLETE** as portable one-box solution guarantees mobility, easy setup and convenient handling;
- **FIELD NOSE NET** is an environmental monitoring network with measurement stations and a central database.

### MONITORING, MEASUREMENTS AND STATISTICAL EVALUATION

With FIELD NOSE, electromagnetic fields caused by radio communication devices (GSM, UMTS W-LAN or WiMAX) and by analog and digital radio and TV broadcasting stations can be measured and the origin identified. It offers accurate measurements, monitoring applications and statistical evaluation of EM fields (e.g. in densely populated areas, in buildings and around transmitting stations).

NOSE software has been specially designed for fully automatic measurements and visualizations. With the aid of this software, critical locations such as schools and hospitals can be continuously monitored over an extended period of time. In case the fields exceed a predefined threshold, several actions can be triggered, including a detailed spectral investigation, permanent storing of measurements and alarm generation via SMS or Email.



### HOW FIELD NOSE SMELLS THE SPECTRUM

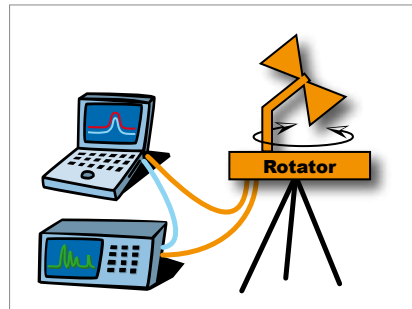
An antenna with a well-defined radiation pattern is used to measure the electric field strength. The antenna is positioned sequentially in three orthogonal orientations by the rotator. The software calculates the equivalent isotropic field strength from three measured values with the Add3D algorithm. This guarantees optimum isotropic characteristics.

The isotropic radiation pattern of the Add3D concept notably simplifies measurements since they need not be carried out with different polarization and in different directions for each frequency. The antenna offers considerably higher sensitivity and a wider dynamic range than active, broadband field strength sensors. Consequently, high field strengths in the vicinity of emitters as well as low field strengths, which occur further away from the field-strength source, are measured reliably and accurately.

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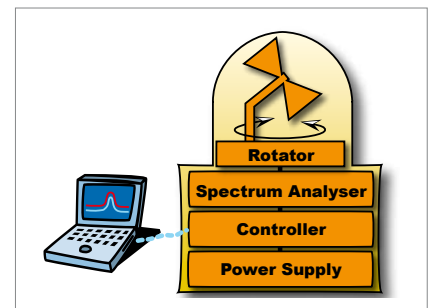
## FIELD NOSE BASIC the modular solution

Broadband dipole PCD 8250 with ÖKD calibration, automatic antenna rotator, cables (USB and RF) and measurement software NOSE in a transport box Spectrum analyser, tripod and laptop computer are available optionally



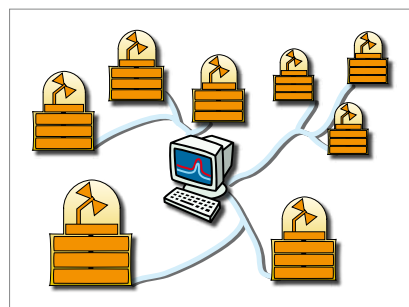
## FIELD NOSE COMPLETE mobile and comfortable

All components like antenna, rotator, control computer and power supply in one box, for convenient measurements and stand alone monitoring system. Optional mobile phone for external remote control and alarm generation via SMS or E-mail and GPS for location recording.



## FIELD NOSE NET the measurement network

Stand-alone field strength monitoring network with up to hundreds of measurement stations. Data base solution for handling large amounts of field strength data, visualization of data via web clients. Compatible to existing environmental monitoring networks



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Presented by: