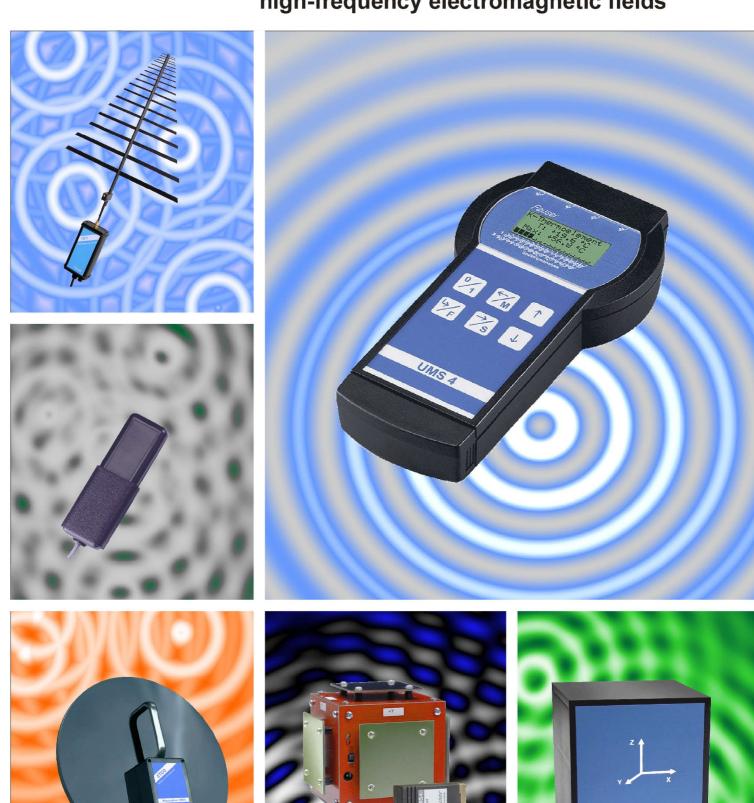


UMS4 - The multi-purpose measuring system - the solution for low-frequency and high-frequency electromagnetic fields



# Universalmesssystem UMS4

# Measuring system UMS4

The multi-purpose measuring and recording system UMS4 for environmental protection and industrial safety as well as organic architecture is a measuring device and data logger all in one. Up to 16 measurable variables can be identified in parallel and recorded using the logger function.

A comprehensive range of sensors for electromagnetic fields, climatic, chemical and technical measurable variables and many more are available.

The comprehensive range of functions includes acoustic signalling, limit values that can be set and different AC/DC outputs. The PC program DATA-UMS that has been specifically developed for the measuring system UMS4 enables an uncomplicated evaluation and documentation of the measured values for many purposes.

## Magnetic field sensor MAG3

The sensor MAG3 is a newly developed product for the isotropic measurement of alternating magnetic fields. A sensor surface of 100 cm<sup>2</sup> according to DIN 0848 enables measurements complying with the standards, for example carried out on workplaces. The sensor has a frequency range of 5 Hz to 400 kHz, four filtering functions and a real effective value rectification (TRMS).

Total flux density as well as X, Y and Z components are displayed simultaneously. Field strength in Gauss, maximum, minimum and mean values can be displayed in addition.

# Adapter EFI3 with sensor 3D-EFM

The interface adapter EFI3 enables the operation of the sensor 3D-EFM for alternating electric fields manufactured by the company ROM-Elektronik directly on the measuring UMS4. Therefore the operation of 3D-EFM is mobile and uncomplicated as no computer is required for control and display any more.

For this reason, the potential-free and three-dimensional measuring of electric fields is very easy, the frequency range is 10 Hz to 100 kHz. UMS4 displays the three measured components of the electric field strength as well as the resulting equivalent field strength.

## Radiation density sensor HF1

The power flux density sensor HF1 for high-frequency radiation enables you to measure mobile radio (D, E networks, UMTS) and cordless telephones (DECT, CT1+).

The broadband antennas offer a large frequency range from 250 MHz to 2.5 GHz.

The very high sensitivity of HF1 enables a resolution of 10 nW/m<sup>2</sup> (1 pW/cm<sup>2</sup>!).

As a result, very low radiation values can be recorded; this is necessary for measurements carried out in living rooms and bedrooms.

The peak value and the mean value are displayed simultaneously, you can choose W/m<sup>2</sup> and V/m as well as selectable units and two analogue bar graph displays are available as well.

The integrated loudspeaker of the sensor HF1 makes the modulation of the H signal audible.

#### **TCO sensor ETCO**

For standard measurements of alternating electric fields on visual display units according to the TCO/MPR regulation, the sensor ETCO disposes of the necessary probe geometry as well as the full TCO band width ranging from 5 Hz to 400 kHz and the relevant frequency filters

In everyday measurings, the sensor ETCO turns out to be an easy-to-operate measuring probe for electric fields thanks to its large sensor surface.

### Combined sensor ME1

The compact, combined sensor ME1 for the simultaneous measuring of alternating electric and magnetic fields in the frequency range up to 100 kHz. An adjustable band pass filter used to identify the frequency spectrum as well as effective value rectification (TRMS) are available.

