# combinova

Field Detector 1 is a combined instrument for electric and magnetic field measurements. It is designed for quick and easy measurements in different work and home environments. The instrument is equipped with a large and easily read thermometer type LED-display with max-hold indication, making it easy to find different field sources.

FD 1 is a powerful tool to study the effects of different measures to reduce electric and magnetic fields. The clearly visible display shows the immediate result of any actions taken.

FD 1 can be used for measurements on all kinds of electric equipment that generates low frequency electric and magnetic fields in the ELF-range. It is also suitable for MPR 1990 Band I measurements of Video Display Units.

FD 1 is based on the same advanced technology as all other Combinova instruments. The microprocessor technology with digital calibration enables the analog electronics to be designed without any adjustable components. This results in high accuracy and longterm stability.





The major features of FD 1 are:

Measures both magnetic and electric fields in the ELF frequency range.

Easy to use. Push a button and read the result on the thermometer display.

3-axis system for magnetic fields.

Electric field measurements with built-in sensor using a ground reference method.

# **FIELD DETECTOR 1**



# **TECHNICAL DATA**

Magnetic fields B (RMS) Electric fields E (RMS)

Measurement range: 25 nT - 125 T 2.5 V/m - 10.5 kV/m

Display range: 40 nT - 100 T 4 V/m - 10 kV/m

Sensor system: 3 axis coil system rectangular (50x20 mm)

X-Y-Z or Y-direction with ground reference through

only (selectable) button or ground cable

Measurement frequency: approx. 2.5 measurements per second

Frequency range: 20 Hz - 2.0 kHz - 3dB

Display resolution: 4 - 12 % (logarithmic scale)

Accuracy: 5% at 15-25°C

Temperature coefficient: less than ±1% / °C (when exceeding 15-25 °C)

Operating temperature: -10 - +40 °C

Batteries: 2 x 1.5 V R6 (AA size) Alkaline

Battery life: approx. 30 hours of measurements

Weight incl. batteries: 290 grams

Dimensions: 205x35x70 mm

Specifications subject to change without notice.

## Order number:

40-10 FD 1 standard version \* with 'Tesla' scale 40-20 FD 1 standard version \* with 'Gauss' scale

#### Warranty

Warranty includes material and manufacturing failures within one year from date of delivery.

#### Calibration:

The FD 1 is computer calibrated during manufacturing. Calibration is stored in an EEPROM.

### Also available from Combinova:

Field Detector 2 - measures magnetic and electrical fields in the VLF-range



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<sup>\*</sup> Standard version includes batteries, carrying case in leather, ground cable and manual.