

PCE-EM29

Electrical field meter for three-dimensional measurements up to 3.5 GHz

The electrical field meter comes with a spherical, three-dimensional probe to detect electromagnetic radiation from 50 MHz up to 3.5 GHz. The electrical field meter is equally suitable to measure in transformers, also for the evaluation of magnetic fields that are produced by computer displays, televisions and industrial installations. It is also capable of detecting radiation of wireless systems, such as a wireless LAN, of GSM or to determine radiation from microwave ovens. With frequencies up to 3.5 GHz, it can be used effectively in high frequency ranges. Thanks to its three-dimensional probe, it makes the conversion of each axis individually.

- Three-dimensional probe (spherical)
- Function to calculate average value
- Memory for 99 readings (stored values can be shown on the display)
- Different units of measurement
- Adjustable alarm limit values
- Large display
- Frequency range up to 3.5 GHz
- Suitable for the analysis of physical work space



Technical specifications

Frequency range	50 MHz to 3.5 GHz
Sensor type	electrical field (E)
Measurement	three-dimensional, isotropic
Measurement range	38 mV/m to 11 V/m
Range selection	automatic
Response time	1 s (until 90 % of absolute value is reached)
Units	mV/m, V/m, $\mu\text{A}/\text{m}$, mA/m, $\mu\text{gW}/\text{m}^2$, mW/m ²
Resolution	0,1 mV/m; 0,1 $\mu\text{A}/\text{m}$; 0,01 $\mu\text{gW}/\text{m}^2$
Absolute error	$\pm 1,0$ dB
Accuracy	$\pm 1,0$ dB (50 MHz to 1,9 GHz) $\pm 2,4$ dB (1,9 GHz to 3,5 GHz)
Isotropic deviation	$\pm 1,0$ dB (in one frequency >50 MHz)
Maximum value over-range	4,2 W/m ² (40 V/m)
Deviation due to temperature	$\pm 1,5$ dB
Display update	every 400 ms
Limit value	adjustable
Alarm	Piepton bei Grenzwert- überschreitung
Average value	adjustable from 4 s to 15 min
Memory	99 readings (can be shown on the display)
Power	9 V battery
Dimensions	220 x 60 x 30 mm
Weight	350 g

Contents

PCE-EM29 electrical field meter, battery, case and user's manual

Model No.	Description
PCE-EM29	PCE-EM29 electrical field meter

Gamma-Scout®

Alpha, beta and gamma radiation detector with memory and software

This radiation detector has an interface and software for data transfer to a PC. Its modern technique allows you to determine low level radiation in a range of >0.01 $\mu\text{Sv}/\text{h}$, as well as high level radiation.

One push of a button is enough to start radiation monitoring. Gamma-Scout makes day and night inspections and the result is displayed in its large display. If you want, you can store the values and transmit them to the PC at your convenience. The software and USB cable are included in the delivery.

- Geiger-Müller counting tube
- Measures alpha, beta and gamma radiations
- Ray selection switch
- Memory for data storage
- GS-2 model has audio alert function
- Comes with calibration certificate



Technical specifications

Detector	reliable Geiger-Müller detector
Radiation type	alpha from 4 MeV beta from 0,2 MeV gamma from 0,02 MeV
Diaphragm aperture	alpha: without shielding beta: Al foil approx. 0.1mm, alpha protected gamma: Al shielding approx. 3 mm, shielding off alpha completely and beta to 2 MeV, weakens gamma less than 7%
Sensitivity	95.0 pulses / minute referenced to Co60 radiation
Zero rate	<10 pulses/min
Measurement range	0.01 $\mu\text{Sv}/\text{h}$ to 1000 $\mu\text{Sv}/\text{h}$
Battery	10 years, less with interface use
Power	< 10 mA
Pulses measurement	1 to 99 s, 1 to 99 min, 1 to 99 h, 24 h average in $\mu\text{Sv}/\text{h}$
Pulses storage	1 min, 10 min, 1 h, 24h, 7 days
Memory	2 KB
Interface	RS-232
Indicator	4 digit LCD
Operating conditions	-20 to +60 °C
Enclosure	impact-resistant plastic
Dimensions	161 x 72 x 30 mm
Weight	153 g
Certificates	certificate of quality for each unit
Standards	CE standard USA standard FFC15

Contents

Gamma-Scout® with software, USB cable, certificate of quality, battery and user's manual

Model No.	Description
GS-1	Gamma-Scout GS-1
GS-2	Gamma-Scout GS-2 with adjustable alarm
GS-3	Gamma-Scout GS-3 for transmission in real time

Optional accessories

GT-GS	Holster with belt clip
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PCE-G28

Magnetic field meter with 3-axial probe (0 to 2000 μT or 0 to 20,000 mGs)

The magnetic field meter with 3-axial probe determines electromagnetic radiation. This device has been specially developed to measure transformers and to evaluate magnetic fields generated by computer screens, televisions, industrial electric systems (magnetic separators, electric motor, etc.). This unit meets European standards; European Union Electromagnetic Compatibility Directive IEC 801-1 (EN 50081-1) and it also meets laboratory and measurers prescriptions; IEC 204 (IN 60204).

- 3-axial probe for magnetic field measurements
- "HOLD" function
- Units: μT or mGs
- Wide frequency range (up to 300 Hz)
- Battery powered
- Ideal for workplace applications
- Satisfies European standards
- ISO calibration certificate (optional)



Technical specifications

Measurement ranges	microTesla: 0 to 20 μT / 0 to 200 μT / 0 to 2000 μT milli Gauss: 0 to 200 mGs / 0 to 2000 mGs / 0 to 20,000 mGs
Resolution	0.01 / 0.1 / 1 μT (depending on measure. range) 0.1 mGs / 1 mGs / 10 mGs
Accuracy	± 4 %; +3 d (in range 20 μT and 200 mGs) ± 5 %; +3 d (in range 200 μT and 2000 mGs) ± 10 %; +5 d (in range 2000 μT and 20,000 mGs) these accuracies are available in the frequency: 50 - 60 Hz and < 3 V/m (RF).
Frequency	30 to 300 Hz
Indicator	LCD
Power	9V battery
Dimensions	device: 195 x 68 x 30 mm probe: 225 x 75 x 55 mm
Weight	470 g (with battery)



Contents

PCE-G28 magnetic field meter, combined 3-axial probe and 1 m cable, battery, carrying case and user's manual

Model No.	Description
PCE-G28	PCE-G28 Gaussmeter

Optional accessories

CAL-EMF	ISO certificate
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