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Measuring the World Around You

E200 Data Sheet

3-Axis RF Field Strength Meter



Description:

This meter is designed for measuring and monitoring Radio–Frequency electromagnetic field strength. The E200 is compact, durable and easy to use.

Features:

- The meter is a broadband device for monitoring high frequency radiation in the range from 50MHz to 3.5GHz
- Isotropic (non-directional) measurements of electromagnetic fields with three-channel measurement sensor
- Reports electrical and magnetic field strength and also power density
- Display the instantaneous, maximum or average values
- High dynamic range due to three-channel digital results processing
- Adjustable alarm threshold and memory function
- Easy & safe to use
- Low battery indicator "==""
- Store and recall up to 200 data sets
- Memory over-load indicator

Applications:

- Measurements of electric field strength in TEM cells and absorber rooms
- Mobile phone base station antenna radiation power density measurement
- Wireless communication applications (CW, TDMA, GSM, DECT)
- RF power measurement for transmitters
- Wireless LAN (Wi-Fi) detection, installation
- Spy camera, wireless bug finder
- Cellular phone radiation safety level
- Microwave oven leakage detection
- Personal living environment EMF safety







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Technical Specifications	
Display Type	Liquid-crystal (LCD), 4-1/2 digits, maximum reading 19999
Measurement Method	Digital, triaxial measurement
Directional Type	Isotropic (triaxial)
Range Selection	One continuous range
Resolution	0.1mV/m, 0.1µA/m, 0.001µW/m², 0.001µW/cm²
Setting Time	Typically 1.5s (0 to 90% measurement value)
Sample Rate	3 times per second
Units	mV/m, V/m, μA/m, mA/m, μW/m², mW/m², μW/cm²
Display Value	Instantaneous measured value, maximum value, average value, or
	maximum average value
Audible Alarm	Buzzer
Alarm Function	Adjustable threshold with ON / OFF
Calibration Factor	Adjustable
Data Storage/Recall	200 Data Sets
Batteries	9V
Battery Life	Approximately 15 hours
Auto Power-Off	Default time 15 minutes. Adjustable
	threshold 0~99 minutes
Dimensions	60(L) x 60(W) x 195(H) mm
Weight	Approx. 200g (including battery)



Includes:

- E200 Meter
- User Manual
- 9V Battery
- Carrying Case

This instrument conforms to:

- EN61326: Electrical equipment for measurement, control and laboratory use.
- IEC61000-4-2: Electrostatic discharge immunity test.
- IEC61000-4-3:
 Radiated, radio-frequency, electromagnetic field immunity test.

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Electrical Specifications	
Sensor Type	Electrical field (E)
Frequency Range	50MHz ~ 3.5GHz
Specified Measurement Range	 CW signal (f >50MHz): 38mV/m to 20.00V/m 53.0µA/m to 53.74mA/m 0.1µW/m² to 1.089W/m² 0.001µW/cm² to 108.9µW/cm²
Dynamic Range	Typically 75dB
Absolute error at 1V/m and 2.45GHz	■ 2.45GHz: ±1.0 dB
Frequency Response	 Sensor taking into account the typical CAL factor: ±2.4dB (50 MHz to 1.9 GHz) ±1.0 dB (1.9 GHz to 3.5GHz)
Isotropy Deviation	Typically ±1.0 dB (2.45GHz)
Overload Limit	• 0.42mW/cm ² , (11 V/m) per axis
Overload Limit	• (0 to 50°C): ±0.2dB

Unless otherwise stated, the following specifications hold for these conditions:

- The meter is located in the far field of a source
- Sensor head is pointed towards the source
- Ambient Temperature: +23 °C, ±3°C
- Relative Humidity: 25%~75%

