ANAHEIM SCIENTIFIC®

Measuring the World Around You

E201
Data Sheet

Wide Range RF Field Strength **Meter**

Description:

This meter is designed for measuring and monitoring Radio–Frequency electromagnetic field strength. The E201 is compact, durable and easy to use.

Features:

- The meter is a broadband device for monitoring high frequency radiation in the range from 10MHz to 8GHz
- 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

2 YEARS
WARRANTY

CE

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, 0.01V/m, 0.1μA/m, 0.1mA/m, 0.001μW/m^2, 0.01mW/ m^2, 0.001μW/cm^2
Setting Time	Typically 1.5s (0 to 90% measurement value)
Sample Rate	1.5 times per second
Units	mV/m, V/m, μA/m, mA/m, μW/m^2, mW/m^2, μW/cm^2
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 3 hours
Auto Power-Off	Default time 15 minutes. Adjustable threshold 0~99 minutes
Dimensions	370(L) x 80(W) x 80(H) mm
Weight	Approx. 400g (including battery)

Includes:

- E201 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.

Electrical Specifications

Sensor Type	Electrical Field (E)
Frequency Range	10MHz ~ 8 GHz
Specified Measurement Range	▪ CW signal (f >50MHz): ○ 38 mV/m to 11.00 V/m ○ 53.0 µA/m to 28.64 mA/m ○ 0.1 µA/m^2 to 309.3 mW/m^2 ○ 0µ W/cm^2 to 30.93 mW/cm^2
Dynamic range	Typically 75dB
Absolute error at 1V/m and 2.45GHz	± 1.0 dB
Frequency Response	▪ Sensor taking into account the typical CAL factor: ○ ±2.4dB(50 MHz to 1.9 GHz, 3.5 GHz to 8GHz) ○ ±1.0dB (1.9 GHz to 3.5GHz)
Isotropy deviation	Typically ±1.0dB (2.45GHz)
Overload limit	0.083mW/cm^2, (17.7 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%