

# RF DETECTORS & METERS

TMA  
TBM  
TDM

Be safe... be sure... Measure your RF environment

► **Comprehensive range featuring...**

- RF field strength meter
- Miniature sensor/alarm
- Broadband meter

► **For...**

- Environmental monitoring
- Personal safety
- RF field surveys



RF signals are now becoming prolific. Mobile phones, microwave ovens, broadcast services and wireless networks are all adding to an increasingly crowded RF spectrum. Excessive exposure to RF radiation is known to cause health problems and there are strict limits imposed by the NRPB (National Radiation Protection Board) on the amount of RF radiation permitted.

This range of meters and alarms have been developed to meet the increasing need to quantify the level of RF in working and living environments. They offer low cost solutions to cover a wide range of applications. All are self contained, battery powered, hand held devices which feature exceptional ease of use.

**FULL RANGE.** Whether you want a simple high field alarm, or to make accurate measurements, we have the right solution for your needs.

**SAFETY AT WORK.** If your work involves proximity to RF sources such as transmitters or generators, the MicroAlert gives an immediate audible warning when a high RF level is detected.

**INVESTIGATIONS.** The Broadband meter provides measurements of RF field strength, electric field and magnetic field, all in one compact instrument. Everything from the magnetic field from mains supplies (50Hz) to the electric fields generated at microwaves frequencies at 2.5 GHz can be measured.

**MEASUREMENTS.** The RF power density measures the RF intensity at any location. It covers the frequency range 0.5MHz - 3GHz that includes broadcast transmissions, mobile phones, microwaves and the new wireless computer network systems such as Bluetooth.

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## MicroAlert A sensitive RF detector (-S) or an alarm to warn of hazardous RF radiation (-P)

The MicroAlert radio/microwave alarm is the size of a small pager, just 5.7cmx4cmx2cm. The high sensitivity version is ideal for anyone who needs to find out exactly what is emitting radio or microwaves, including hidden sources. An industrial version is triggered by higher levels of radiation and is ideal for personal alarm use when working near transmitters or RF sources. The alarm provides an audio output that beeps when the pre-set level is reached, and increases the frequency of the beeps if the signal increases further. The sensitive version will detect a typical mobile phone base station from 100 metres, a mobile phone at 6 metres and a microwave oven at 3-10 metres.



### Specification

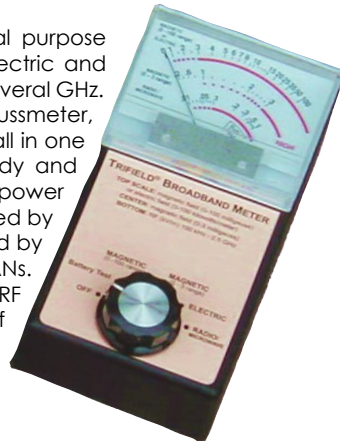
Sensitivity:	-S version	3uW/cm <sup>2</sup>
	-P version	3mW/cm <sup>2</sup>
Frequency range:	6MHz - 3GHz	
Output:	Audible	
Power:	Internal battery has a typical lifespan of 3 years. Replacement batteries are lithium type 2032	
Size:	5.7cm x 4cm x 2cm	
Weight:	32g	

### Order code:

Sensitive version:	T-MA-S
Professional version:	T-MA-P

## Broadband Meter The perfect solution for the monitoring/measurement of RF pollution

The Broadband meter was designed as a general purpose electromagnetic measurement tool. It detects electric and magnetic fields from power line frequencies up to several GHz. It is unique in its combination of a magnetic AC gaussmeter, electric field meter and an RF field strength meter, all in one small package. Therefore, it can be used to study and measure the magnetic fields produced by electrical power cables (including overhead lines), the fields produced by video displays, right through to the radiation emitted by microwave ovens, mobile phones and wireless LANs. Other applications include the measurement of RF environments to minimise health risks, detection of leakage from microwave ovens and detection of concealed transmitters.



### Specification

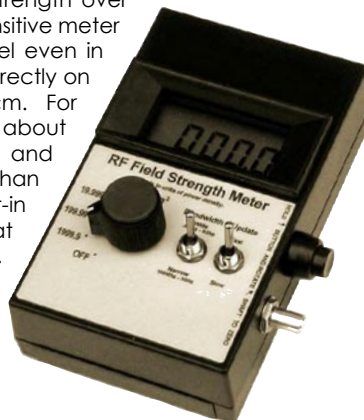
Gauss meter:	0-3 range:	0.2-3 milligauss
	0-100 range:	3-100 milligauss
	Freq. range:	50-500Hz flat
	Accuracy:	±20% to 50MHz
Electric Field:	Range:	10V/m-100KV/m
	Freq. range:	0.04-100KHz
	Accuracy:	±25% at 50 Hz
RF field strength:	Range:	0.01-1KV/m
	Freq. range:	100KHz-2.5GHz flat
	Indication:	Analogue meter with rotary range change switch
Power:	9V (PP3) internal battery	
Size:	15cm x 9cm x 3cm	

### Order code:

TBM-100

## Digital Power Meter Accurate measurement of RF power

This Power Density Meter measures the RF field strength over the range 0.0001 to 2000uW/cm. This extremely sensitive meter can accurately measure the RF background level even in rural areas. The meter reads true power density directly on the display with 3 ranges, 20, 200 and 2000uW/cm. For comparison, a typical cordless phone will produce about 0.01uW/cm at a distance of 50 feet. At FM, TV and mobile phone frequencies, accuracy is better than 3dB. Unlike many other power meters, it has a built-in antenna and a detection system which yields a flat response over a very wide range of frequencies. Even at 5GHz signals can still be measured. The meter features an internal 9v battery with a low battery indication when there is about 10 minutes life remaining.



### Specification

Gauss meter:	3MHz-2.5GHz (±25%)
	0.5MHz-3GHz (-3db)
Max. Sensitivity:	0.001uW/cm <sup>2</sup> at 1GHz
Sensitivity:	25% at 5GHz
	10% at 10GHz
Max. reading	2000 uW/cm <sup>2</sup>
Readout	LCD, 4½ digit
Bandwidth:	Wide: 0.5MHz-3GHz
	Narrow: 100MHz -3GHz
Antenna:	Internal
Averaging:	Fast/Slow selector switch
Power:	Internal battery (PP3)
Battery life:	60 hours (1,000mAH battery)
Size:	15cm x 9cm x 3cm

### Order code:

TDM-200

## Specialised Products for your specific application

Type	Air Ion Counter	Static Surface Voltmeter	DC Gauss Meter	Air Shipment Meter	Natural EM Meter
Summary	Measures atmospheric conditions and checks output from ion generators	Specified for 25mm or 150mm distance. Remotely measures static voltage existing on a surface cable.	Measures strength of permanent magnets, electromagnets and the earth's magnetic field.	Also called the Oersted meter. Verifies the magnetic fields of packages to be shipped by air.	Detects changes in very weak (DC or Natural) electric and magnetic fields as well as radio.
Order Code	TIC-50	TSSV-50	TGM-50	TSM-200	TNM-50

Available from:



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