



THE EASTERN SPECIALTY COMPANY

CAT. 1120

RF METER

ABOUT

The TESCO RF Meter combines all the features needed for fast, accurate measurements of electromagnetic fields. This instrument was designed to measure RF, but also has the ability to measure electric and magnetic fields.

The RF (Radio/Microwave) setting can detect up to three billion Hz (3 GHz), which lets you gauge radio-wave power, cellular phone equipment, microwave and many types of RF emitting household and industrial equipment. The RF setting detects vertical electric fields parallel to the long axis of the meter. The range of the meter is 10V/m to 1 KV/m (0.026 mW/cm² to 260 mW/cm²) and is frequency-flat from 100 KHz to 2.5 GHz. Accuracy is +/-30%. The RF Meter's primary use is to detect ON-AIR status of transmitters (or to detect concealed transmitters), to check AMI meters, microwave ovens or other microwave equipment for leakage, and to look for RFI sources.

The Radio/Microwave section has a small L-shaped antenna in the front. The signal is amplified and converted to a power density magnitude, calibrated at typical home microwave oven frequency (2 GHz). The RF Meter reads 0 to 1 milliwatt/square centimeter. The resolution at the bottom of the range is 0.01 mW/cm². A radio wave strength of 0.01 mW/cm² has 0.006 KV/m and 0.2 milligauss, respectively, of electric and magnetic field (RMS averaged), while a strength of 1 mW/cm² corresponds to 0.06 KV/m and 2 milligauss. Typical accuracy is within a factor of two. Variations may be caused by reflections off the user's hand and body.



SPECIFICATIONS

- **Frequency Range:** 50 MHz-3000 MHz (3 GHz)
- **Range Resolution:** 1 mW/cm² / 0.01 mW/cm²
- **Accuracy:** 0.5x to 2x of reading
- **Settings**
 - A: Magnetic Field (0-100 milligauss range)
 - B: Magnetic Field (0-3 milligauss range)
 - C: Electric Field
 - RF: Radio/microwave (mW/cm²)
- **Dimensions:** 5.0 x 2.6 x 2.4 in (129 x 67 x 62 mm)
- **Weight:** 8 oz
- **Battery:** 9 Volt alkaline (40 hour life) / Low Battery Indicator

