

THREE-AXIS RF FIELD STRENGTH METER

An ISO 9001:2008 Company

designed for meter is measuring and monitoring Radio-Frequency electromagnetic field strength. The meter is calibrated precisely over the frequency range of 50MHz ~ 3.5GHz.

This meter is used to indicate electromagnetic pollution generated artificially, & wherever a voltage or a



Model KM 195



current, electric(E) and magnetic(H) fields arise. All types of radio broadcasting, Mobile Towers and TV transmitters produce electromagnetic fields, and they also arise in industry, business and the home, where they affect our health even if our sense organs perceive nothing.

APPLICATIONS:

- Quite often routine, maintenance and service work has to be done in areas where active electromagnetic fields are present, e.g. in broadcasting stations, etc. Additionally, other employees may be exposed to electromagnetic radiation. In such cases, it is essential that personnel be not exposed to dangerous levels of electromagnetic radiation, such as:
- High frequency (RF) electromagnetic wave field strength measurement.
- . 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 / Cordless phone radiation safety level. Microwave oven leakage detection.
- · Personal living environment EMF safety.

FEATURES:

- The meter is a broadband device for monitoring highfrequency radiation in the range from 50MHz to 3.5GHz $\,^{ullet}$ At high frequencies, the power density is of
- The non-directional electric field antenna and high sensitivity also allow measurements of electric field strength in TEM cells and absorber rooms.
- Configurable alarm threshold and memory function.
- High dynamic range due to three-channel digital results processing.

- · Easy & safe to use.
- particular significance. It provides a measure of the power absorbed by a person exposed to the field. This power level must be kept as low as possible at high frequencies.
- · Non-directional (isotropic) measurement with three-channel measurement sensor.

EMC:

This tester was designed in accordance with EMC Standards in force and its compatibility has been tested in accordance with EN61326-1 (2006).

ACCESSORIES:

User's manual, 9V battery, Carrying case.

GENERAL SPECIFICATIONS:

- * Display: 4½ digit 19999 counts liquid-crystal LCD display
- * Measurement method : Digital, triaxial measurement
- * Display value: instantaneous measured value, maximum value, average value, or maximum average value.
- * Directional characteristic: Isotropic, triaxial.
- *** Display resolution:** 0.1mV/m, 0.1 A/m, 0.001 W/m², 0.001 W/cm²
- * Audible alarm: Buzzer.
- * Units: mV/m, V/m, A/m, mA/m, W/m2, mW/m2, W/cm2

- * Alarm function: adjustable threshold with ON / OFF.
- * Manual data memory and read storage: 200 data sets.
- * Batteries: 9V battery
- * Battery life : Approx. 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)

ELECTRICAL SPECIFICATIONS:

- Sensor Type: electrical dield (E).
- Frequency Range: 50MHz ~ 3.5GHz.
- Specified measurement range:

- CW signal (f >50MHz): 0.01V/m ~ 20.0 V/m
- 0.1mA/m ~ 532.6mA/m, 0.01W/m² ~ 106.94mW/m².
- 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 (50MHz to 1.9 Ghz) Isotropy deviation. Typically ± 1.0dB (f 2.45GHz) Overload limit: 0.42 mW/cm² (11 V/m) per axis.

± 1.0dB (1.9GHz to 3.5GHz) Overload limit: (0 to 50°C): ± 0.2dB.

All Specifications are subject to change without prior notice



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