

# TES-593 ElectroSmog Meter



## FEATURES

- Frequency range 10MHz to 8.0GHz
- 3 axis isotropic measurements of EMF
- Non-directional (isotropic) measurement with three-channel measurement probe
- High dynamic range
- Configurable alarm threshold and memory function
- Easy & safety to use



## APPLICATIONS

- 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



## SPECIFICATION

### ELECTRICAL SPECIFICATIONS

|                                     |  |
|-------------------------------------|--|
| Sensor type                         | Electric field (E)   |
| Frequency range                     | 10MHz to 8GHz  |
| Directional characteristic          | Isotropic, 3-dimensional   |
| Measurement range (CW signal>10MHz) | 20mV/m to 108.0V/m<br>53mA/m to 286.4mA/m<br>1 $\mu$ W/m <sup>2</sup> to 30.93W/m <sup>2</sup><br>0 $\mu$ W/cm <sup>2</sup> to 3.093mW/cm <sup>2</sup> |

|   |   |
|---|---|
| <b>Absolute error<br/>(@1V/m and 10MHz)</b>                             | ± 1.0dB   |
| <b>Frequency response<br/>(taking into account typ.<br/>CAL factor)</b> | ± 1.0dB (10MHz to 1.9 GHz)<br>± 2.4dB(1.9GHz to 8GHz) |
| <b>Isotropy deviation</b>   | Type. ±1.0dB 於 f>10 MHz                               |
| <b>Overload limit</b>   | 10.61mW/cm <sup>2</sup> (200 V/m)                     |
| <b>Temperature response<br/>(0 to 50 °C)</b>                            | ± 0.5dB   |

## GENERAL SPECIFICATIONS

|  |  |
|--|--|
| <b>Measurement method</b>                      | Digital , triaxial measurement   |
| <b>Directional characteristic</b>              | Isotropic, triaxial  |
| <b>Measurement range<br/>selection</b>         | One continuous range   |
| <b>Display resolution</b>                      | 0.1mV/m, 0.1μA/m, 0.1μW/m <sup>2</sup> , 0.001μW/cm <sup>2</sup>                       |
| <b>Setting time</b>                            | Typically 1s ( 0 to 90% of meas. value)  |
| <b>Display refresh rate</b>                    | Typically 0.5Sec.  |
| <b>Display type</b>                            | LCD 4 digit  |
| <b>Audible alarm</b>                           | Buzzer   |
| <b>Measurement units</b>                       | mV/m , V/m , μA/m , mA/m , μW/m <sup>2</sup> , mW/m <sup>2</sup> , μW/cm <sup>2</sup>  |
| <b>Measurement display<br/>value</b>           | Instantaneous measured value, maximum value,<br>average value or maximum average value |
| <b>Measurement alarm<br/>function</b>          | Adjustable threshold with ON/OFF   |
| <b>Measurement calibration<br/>factor CAL</b>  | Adjustable   |
| <b>Manual data memory and<br/>read storage</b> | 99 sets ( only recall by meter )   |
| <b>Battery</b>                                 | 9V   |
| <b>Battery life</b>                            | >15 hours  |
| <b>Dimensions</b>                              | Approx. 67(W) x 60(T) x 247(L) mm  |
| <b>Weight</b>                                  | Approx. 260g (including battery)   |
| <b>Accessory</b>                               | 9V battery, carrying case, manual  |