## Elma 593R ELECTROSMOG METER (3 axis)

## **FEATURE:**

- ☐ 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.
- ☐ Use rechargeable lithium-ion battery pack
- □ LCD backlight function.
- ☐ Easy & safety to use.

## **APPLICATIONS:**

- ☐ High frequency (RF) electromagnetic wave field strength measurement.
- ☐ Mobil 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.

## ELECTRICAL SPECIFICATIONS GENERAL SPECIFICATIONS

Sensor type	Electric field (E).
Frequency range	10MHz to 8GHz
Directional characteristic	Isotropic, 3-dimensional.
Measurement range (CW signal > 10MHz)	$20 mV/m$ to $108.0 V/m$ , $53 \mu A/m$ to $286.4 mA/m$ , $1 \mu W/m^2$ to $30.93 W/m^2$ , $0 \mu W/cm^2$ to $3.093 mW/cm^2$
Dynamic range	Typical 75dB
Absolute error (@1V/m and 10MHz)	±1.0dB
Frequency response (taking into account typ. CAL factor)	±1.0dB (10MHz to 1.9GHz) ±2.4dB (1.9GHz to 8GHz)
Isotropy deviation	Typ. ±1.0dB for f >10MHz
Overload limit	10.61mW/cm² (200V/m)
Temperature response (0 to 50°C)	±0.5dB



Measurement method	Digital, triaxial measurement
Directional characteristic	Isotropic, triaxial
Measurement range selection	One continuous range
Display resolution	0.1mV/m, 0.1 $\mu$ A/m, 0.1 $\mu$ W/m², 0.001 $\mu$ W/cm²
Setting time	Typically 1s (0 to 90% of meas. value)
Display refresh rate	Typically 0.5 seconds
Display type	LCD 4 digit
Audible alarm	Buzzer
Measurement units	mV/m, V/m, μA/m, mA/m, μW/m², mW/m², W/m², μW/cm², mW/cm²
Measurement display value	Instantaneous measured value, maximum value or maximum average value
Measurement alarm function	Adjustable threshold with ON/OFF
Measurement calibration factor CAL	Adjustable
Manual data memory and read storage	99 sets (only recall by meter)
Rechargeable lithium-ion battery	3.6V, 1940mAh Charging time: Approx. 3 hours
Battery operation time	Approx. 10 hours
Dimensions	Approx. 67(W) x 60(T) x 247 (L)mm
Weight (including battery)	Approx. 250g
Accessories	Instruction manual, Rechargeable Lithium-ion battery, Carrying case, AC adaptor (DC 5V 1.5A)