

RF/High Frequency Meter HF-A3G





Contents

1	Introduction	1
2	Application	1
3	Features	1
4	Identifying Parts	2
5	Measurement Procedures	3
6	Specifications	5
7	Battery replacement	6
8	Safety Precaution	6
9	End of life	7



1 Introduction

- This meter is designed for measuring and monitoring electromagnetic field value of the Radio –Frequency
- The meter is calibrated precisely on the frequency value 2.45 GHZ(Microwave Oven)

2 Application

- This meter is applied to measuring electromagnetic fields of Radio –Frequency of normal or 2.45 GHZ
- It is capable of measuring the electromagnetic field radiation intensity that is produced from welding equipment incrowave oven and other environment... etc.

3 Features

- Switch between 2.45 GHZ (microwave frequency) or normal (50MHZ~3.5 GHZ).
- Data hold (HOLD) \(\text{maximum (MAX) Hold} \(\text{minimum (MIN) Hold} \) Zero function.
- Measurement range of RF power density : 0.01~2.700m W/cm² ∘
- Build in alarm setting, when the measuring value is more than 1m W/cm², the buzzer will sound
- Auto power OFF function.





Over load indication "OL".

4 Identifying Parts



- 1. Sensor position.
- 2. LCD
- 3. Zero button
- 4. Power on/off.
- 5. maximum hold and minimum hold select button
- 6. Frequency Team select button
- 7. Data hole button
- 8. Tripod mounting screw Battery cover.



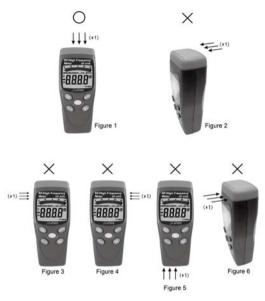
HF-A3G

5 Measurement Procedures

- Press button to power on.
- Press button test frequency to select 2.45 GHZ or normal (50MHz to 3.5 GHz).
- Position the top (refer to Figure 1) of the meter to measure the electromagnetic waves. Try to change the measurement angle or position for obtaining the highest reading value (please refer to Figure 2 to 6).
- Due to the environmental magnetic field factors, this magnetic field meter could display a reading value that is lower than 0.002 m W/cm² prior to measuring.
- To permanently lock and keep the reading displayed on the LCD, press hold button or press hold button again to unlock.
- To retain the maximum value, press button and the reading value displayed on the LCD will keep updating to the maximum value.



HF-A3G



- Figure 1 indicates the correct measurement direction of the RF electromagnetic field strength measurement.
- Figure 2, 3, 4, 5 and 6 indicate the incorrect measurement direction of the RF electromagnetic field strength measurement.
- AUTO POWER OFF function
 - In order to save the battery power the meter will be off after 30 minutes of non-use.



HF-A3G

- To disable this function please turn off the power then hold MAX/MIN key ,press power key.
- 3. Turn the power OFF then ON to restore this function the symbol Θ is displayed.

6 Specifications

■ **Display**: 3-3/4 digits LCD, maximum reading 3999.

■ Resolution: 0.001mW/cm²

■ Frequency response: 50MHz to 3.5 GHz.

■ Sensor : Single Axis

■ Accuracy: ±2 dB at 2.45 GHz ± 50MHz

Over load : LCD display "OL".

■ Sample rate : 2.5 times per second.

■ Battery: 9V NEDA 1604, IEC 6F22 or JIS 006P.

Battery life : Approximate 100 hours.

• Operating temperature & humidity : 5° C to 40° C, below 80% RH.

■ Storage temperature & humidity: -10°C to 60°C, below 70%.

Weight : About 170g.

■ **Dimensions**: 130(L)*56(W)*38(H) mm.

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



7 Battery replacement



WARNING

If the symbol " appears on the LCD, please replace the battery immediately

- Turn off the instrument.
- Remove the battery cover
- Replace the battery.
- Install the battery cover.



8 Safety Precaution

- For cleaning the instrument use a soft dry cloth. Never use a wet cloth, solvents or water, etc..
- Operation Altitude: Up to 2000M.
- Operating Environment: Indoors use. This instrument has been designed for being used in an environment of pollution degree 2.





9 End of life



Caution

This symbol indicates that equipment and its accessories shall be subject to a separate collection and correct disposal

EMR Shielding Solutions Inc.

399 Four Valley Drive, Unit 13, Vaughan, Ontario, L4K 5Y7, Canada E-mail: info@emrshieldingsolutions.com www.emrshieldingsolutions.com