MITO METER 2.0 [EURO]

Electromagnetic Field Meter User Manual

Firmware 1.2.07



Developed by EnviroSens & Blakes Electronic Integrators



Introduction

The MITO METER 2.0 [EURO] is a compact, easy-to-use, yet sophisticated EMF/RF (Electromagnetic Field/Radio Frequency) screening tool. It measures electromagnetic field and radio frequency intensity from various sources, including power lines, fuse boxes, household appliances, electronic devices, and wireless technologies—such as 5G and 6G microwave radiation.

In addition to EMF detection, the Mito Meter can identify spy cameras, tracking devices, wireless bugs, and similar equipment across a broad frequency range. As the world's smallest 3-in-1 EMF/RF meter—weighing less than 2 ounces (50 grams)— It is also ideal for discreet carrying or concealment, allowing users to log radiation levels in sensitive or restricted areas with its built-in recorder.

Designed as a Building Biology pre/post-screening tool, this device is particularly useful for those familiar with Building Biology's recommended guidelines. It features an easy-to-read 18-step LED display allowing users to monitor their surroundings effortlessly in daily life.

For added versatility, an optional USB connection kit allows the Mito Meter to interface with a computer, Mac, or Android device—enhancing its value for research and technical applications. (Recommended for advanced users.)

Important Notice

The Mito Meter displays measurement intensity in three colours: green, yellow, and red. These colours serve as a visual guide and do not indicate whether a reading is definitively safe or unsafe.

In general, lower readings, less noise, suggest an environment that aligns more closely with natural electromagnetic background levels, which is important for overall well-being.

This device is designed for non-professionals to easily screen EMF/RF levels using a simple and intuitive interface. However, measurements intended for legal or professional purposes require specialized equipment and trained operators.

Package Contents

- Pre-Installed LiPo Rechargeable Battery Standard USB to Mini-USB Charging Cable
- PDF Comprehensive Manual & Guide Velcro Mounting Solution Rear-Mount Alloy Body Contact Voltage Pad

Charging LiPo Battery

To charge the Mito Meter battery, use the supplied USB cable to connect it to a USB charger or computer. The front Red LED will be on during charging and turn off once the battery is fully charged. A full charge provides approximately 8–10 hours of operation and 48 hours on LFM-X Mode (Powergrid Monitoring).

Turning ON

When the meter is powered on, it performs a quick self-test along with displaying the battery percentage, lasting approximately 3 seconds. The **1st LED sweep** to the **right** indicates the meter is **powering on** and **running a self-test**. Following the **1**st sweep, the **2nd LED left sweep** indicates the **battery charge percentage**.

Important: When the **Battery Charge** drops **Below 10%**, **Two Solid Green lights will appear in RF Mode**, regardless of whether any RF is detected. To ensure accurate readings, make sure the battery is at least half-charged before heading out. Charging for just 10 minutes from a flat battery will provide approximately 50% charge—plenty enough to screen properties for a few hours.

Turn the meter on with the **Power ON/OFF switch**.

Use the **Mode Switch** to select a detection mode:

- RF Mode Measures Radio Frequencies, also referred to as microwaves, Wi-Fi and 5G.
 - o Range: 100MHz to 8GHz
 - Alarm One: Sounds at 500 μW/m²
 - Alarm Two: Sounds when the maximum power value is exceeded at 100,000 μW/m².
- LFM Mode Measures Low-Frequency Magnetic fields.
 - o Range: 40Hz to 10kHz
 - o Alarm One: Sounds at 200 nT
 - o Alarm Two: Sounds when the maximum power value is exceeded@2,000 nT.
- LFE Mode Measures Low-Frequency Electric fields, also referred to as e-Fields.
 - o Range: 40Hz to 50kHz
 - Alarm One: Sounds at 30 V/m
 - o Alarm Two: Sounds when the maximum power value is exceeded @1,000 V/m.

Understanding the Readings

uW/m² (microWatts per square meter)

Used to measure the power density of an RF (Radio Frequency) source.

This value is used for measuring RF radiation from:

4G/LTE/5G cell sites, phones, smart meters, Wi-Fi, Bluetooth, wireless devices, and microwave ovens.

 $1,000 \mu \text{W/m}^2$ (microwatts per square meter) = 1 mW/m^2 (milliwatt per square meter)

nT (nanoTesla)

The magnetic flux density unit (nT) is used to measure alternating current (AC) magnetic field intensity, such as that from:

The PowerGrid, fuse boxes, home appliances, electronics, laptops, phones, cables, and vehicles.

100 nT (nanotesla) = 1 mG (milligauss)

V/m (Volts per meter)

A unit of measurement for electric field (e-Field) strength. Used to measure the intensity of an electric field near voltage sources such as: Cabling, water pipes, power lines, power outlets, hardwired laptops, and devices

uW/m²	nT		V/m	
0.5 ₁₀₀	10 ₁₃	0	2	50
1 200	15 ₁₇	0	3	80
2 ₅₀₀	20 ₂₂	0	4	120
3 _{1k}	30 ₂₈	0	6	180
5 _{2k}	40 ₃₅	0	8	240
10 _{5k}	50 ₄₃		10	320
20 _{10k}	60 ₅₅	0	15	450
30 _{30k}	80 ₇₀		20	600
50 _{100k}	100 2		30	1k

Measurement Methods

There are **18 intensity levels**, displayed using **9 LED lights**. **By matching the LED reading** with the corresponding **numbers on the meter** or **charts** on the following pages, **numerical values can be noted**.

The first nine LEDs—the main working window—are the primary focus for Building Biologists when measuring EMF exposure in homes and workplaces. As radiation power levels become excessive, the coloured LED lights scale up through the main LED window, leaving only red LEDs.

With the speaker (1) on, two separate alarms will sound as radiation levels rise, with the 2nd alarm indicating that the power value has exceeded the meter's maximum limit. (This is rarely the case, as far as background radiation goes in homes and the workplace.)

This dynamic LED window design allows for quick and intuitive monitoring across a broad measurement range, enabling users to interpret readings at a glance or even through peripheral vision. This level of visual feedback is not achievable with numerical readouts alone and can be seen at a distance in both full sunlight and dark situations.



RF Mode – Working Window

In most situations, background RF levels will fall within the first fully lit LED window ($<50 \,\mu\text{W/m}^2$) unless you live near a cell tower or high-powered transmission station.

The goal: Reduce RF exposure in your sleeping area to below $0.1 \,\mu\text{W/m}^2$ —an increasingly challenging task in today's wireless world, especially in congested areas. Prioritizing a low-exposure sleeping environment is a crucial first step.

Building Biologists recommend keeping a property's background RF levels below 10 to 50 μ W/m². Higher levels may require shielding, and the greater the microwave radiation, the more expensive shielding becomes—especially when signals originate from multiple directions.

Pattern Sequence	microWatts (μW/m²)	LED Display Results
1 Green	$0.5 \mu W/m^2 >$	•••••
2 Green	$1 \mu W/m^2 >$	
3 Green	$2 \mu W/m^2 >$	
4 Green	$3 \mu W/m^2 >$	********
4 Green, 1 Yellow	$5 \mu W/m^2 >$	
4 Green, 2 Yellow	$10 \mu W/m^2 >$	********
4 Green, 3 Yellow	$20 \mu W/m^2 >$	
4 Green, 3 Yellow, 1 Red	30μW/m² >	
4 Green, 3 Yellow, 2 Red	$50 \mu W/m^2 >$	
3 Green, 3 Yellow, 2 Red	$100 \mu W/m^2 >$	
2 Green, 3 Yellow, 2 Red	$200 \mu W/m^2 >$	
1 Green, 3 Yellow, 2 Red	$500 \mu W/m^2 >$	
3 Yellow, 2 Red	$1,000 \mu W/m^2 (1k) >$	
2 Yellow, 2 Red	$2,000 \mu W/m^2 (2k) >$	
1 Yellow, 2 Red	$5,000 \mu W/m^2 (5k) >$	
2 Red	$10,000 \mu W/m^2 (10k) >$	••••••
1 Red	$30,000 \mu W/m^2 (30k) >$	
0 LEDs & Alarm	$100,000 \ \mu W/m^2 \ (100k) >$	

LFM Mode - Working Window

In inner suburbs, the average **background dynamic magnetic field levels** typically fall within the first meters 9-LED window working, **around 60nT to 100nT**. Those **in rural areas** or in **upper levels** of **high-rise apartments** will see levels **below 10nT**.

The closer you are to high-load overhead power lines, poorly maintained power infrastructure, or dense city blocks, the higher your readings will likely be.

As a general guideline, your primary objective should be to maintain a sleeping environment as close as possible to 20 nT or below. For daytime exposure, background dynamic magnetic field levels should remain under 100 nT for pregnant mothers and children, and below 200 nT for adults.

Note: Recommendations based on Building Biology and the BioInitiative Report.

Pattern Sequence	nanoTesla (nT)	LED Display Results
1 Green	10 nT >	•••••
2 Green	15 nT >	•••••
3 Green	20 nT >	
4 Green	30 nT >	
4 Green, 1 Yellow	40 nT >	
4 Green, 2 Yellow	50 nT >	
4 Green, 3 Yellow	60 nT >	
4 Green, 3 Yellow, 1 Red	80 nT >	
4 Green, 3 Yellow, 2 Red	100nT >	
3 Green, 3 Yellow, 2 Red	130 nT >	
2 Green, 3 Yellow, 2 Red	170 nT >	
1 Green, 3 Yellow, 2 Red	220nT >	
3 Yellow, 2 Red	280 nT >	
2 Yellow, 2 Red	350 nT >	
1 Yellow, 2 Red	430 nT >	
2 Red	550nT >	
1 Red	700 nT >	
0 LEDs & Alarm	2,000 nT (2k) >	

LFE Mode - Working Window

The average person sleeps in an environment with 1 to 3 volts per meter (V/m) of alternating current (AC) from household wiring. In some homes, due to wiring faults or continuity issues, levels can spike to 10-30 V/m — or, in rare cases, even higher.

These types of electric fields **don't occur in nature**, which is why it's ideal to reduce bedroom exposure to **0.3 V/m or lower**. For most people, achieving this requires **switching off or modifying electrical circuits** near sleeping areas.

Since the Mito Meter only measures down to approximately 1 to 2 V/m, we recommend no LED lights at least 1 to 2 meters away from the bed on LFE Mode.

As a general rule, aim for a **low-exposure environment** where you sleep or spend long periods. To reduce electric fields at workstations, consider **grounding laptops and connected equipment**. If your readings fall in the **red zone**, further steps may be needed. **Online guidance is available**, and we recommend checking out our related post **[here]**.

Pattern Sequence	Volts Per Meter (V/m)	LED Display Results
1 Green	2 V/m >	
2 Green	3 V/m >	
3 Green	4 V/m >	
4 Green	6 V/m >	
4 Green, 1 Yellow	8 V/m >	
4 Green, 2 Yellow	10 V/m >	
4 Green, 3 Yellow	15 V/m >	
4 Green, 3 Yellow, 1 Red	20 V/m >	
4 Green, 3 Yellow, 2 Red	30 V/m >	
3 Green, 3 Yellow, 2 Red	50 V/m >	
2 Green, 3 Yellow, 2 Red	80 V/m >	
1 Green, 3 Yellow, 2 Red	120 V/m >	
3 Yellow, 2 Red	180 V/m >	
2 Yellow, 2 Red	240 V/m >	
1 Yellow, 2 Red	320 V/m >	
2 Red	450 V/m >	
1 Red	600 V/m >	
0 LEDs & Alarm	1,000 V/m (1k) >	

Measurement Technique

The Mito Meter uses single-axis directional antennas and a low-frequency single-axis gauss sensor for measurements, requiring rotation in all directions/axes for the best results. Move the meter around to identify the highest reading—the highest reading represents the most accurate value. (Note: The MITO Meter's single-axis Gauss sensor is more sensitive than three-axis variants, making it especially useful for detecting low-level dynamic PowerGrid background fields—ideal for property hunting.

The RF and LFE antennas are located on the top left side of the device. Blocking them with your grip will reduce accuracy. For the most accurate LFE (electric field) readings, hold the meter at the very end of the case by placing your middle finger on the rear-mounted alloy ground pad while applying pressure with your thumb on the front of the case. Then point the meter in the direction you want to measure.

When using LFE Mode with the meter's rear-mounted alloy ground pad, test readings both with and without shoes. Additionally, compare your body voltage potential with and without grounding sheets or grounding pads—many earthing solutions are ineffective and offer little to no protection.

Broadband Detection

- The Mito Meter is a broadband meter, meaning it detects all signals within its selected frequency range at any location.
- In RF mode, if a Wi-Fi router, a Bluetooth device and a cell phone transmit at the same time, the meter captures the three signals and shows a combined result.

Limitations of RF Broadband Meters

- All RF broadband meters, even professional versions, underreport peak RF radiation in heavily congested areas (e.g., cities)—sometimes by up to 10×.
- Real-time RF spectrum analysers with directional antennas are essential for precise signal measurements, accurately identifying individual signals, and calculating total power levels. However, they are complex and extremely expensive.
- Broadband meters are popular for their ease of use, quick setup, and affordability.

Speed vs. Accuracy

- Fast RF broadband meters capture more signals in high radiation environments and can capture fast short bursts of radiation leading to higher readings than slower RF meters. (The Mito Meter samples at 20,000 per second.)
- Accuracy at low RF radiation levels and the ability to listen to RF signals remain more important for assessing and reducing RF exposure in a typical home or workplace.

Extended Modes

The Mito Meter features three extended modes: **RF-Xs Mode** (Sound Signature), **RF-X6 Mode** (Six-Minute RF Monitoring), and **LFM-X Mode** (PowerGrid Monitor). These modes serve as additional tools for EMF screening and mitigation while also assisting professionals in remote consultations with Mito users.

RF-Xs Mode: Sound Signature

This mode helps identify the source of radiation by its patten or what we refer to as the sources unique sound signature.

- 1. Make sure the speaker (1) is **switch is ON** and select **RF Mode**.
- 2. Quickly toggle the **MODE switch** to **LFE and back to RF twice** within two seconds. Two lights (orange and red) will start blinking.
- 3. Then move the **MODE switch** down to **LFM** and back to **RF**. Move towards an RF source to listen to its Sound Signature.

$$RF \rightarrow LFE \rightarrow RF \rightarrow LFE \rightarrow RF ----- RF \rightarrow LFM \rightarrow RF$$

RF-X6 Mode: Six Minute Monitoring

This mode takes approximately 6 million samples over six minutes and then displays the **average** and **highest peak** radiation via the LED display. Included in the results is an **accumulated peak radiation score** based on the estimated **total peak duration time** logged over the six-minute event. (See chart next page.)

Turn on the meter and select **RF Mode**.

- 1. Quickly move the **MODE switch** down to **LFE** and back to **RF twice**, within two seconds. Two lights will be blinking—one orange and one red. The meter is now recording (logging data).
- 2. After six minutes, results will be displayed as follows;
 - o **Average Peak**: Slowly blinking for six seconds.
 - o **Highest Peak**: Fast blinking for six seconds.
 - o **Accumulative Peak Duration:** Displayed for 10 seconds.

$$RF \rightarrow LFE \rightarrow RF \rightarrow LFE \rightarrow RF$$

RF-X6 Mode: Accumulative Peak Duration Chart

Pattern Sequence	Seconds - Peak Duration	LED Display Results
1 Green	0.1 sec >	
2 Green	0.2 sec >	
3 Green	0.3 sec >	
4 Green	0.5 sec >	
4 Green, 1 Yellow	0.7 sec >	
4 Green, 2 Yellow	1 sec >	
4 Green, 3 Yellow	2 sec >	
4 Green, 3 Yellow, 1 Red	3 sec >	
4 Green, 3 Yellow, 2 Red	5 sec >	
3 Green, 3 Yellow, 2 Red	10 sec >	
2 Green, 3 Yellow, 2 Red	20 sec >	
1 Green, 3 Yellow, 2 Red	30 sec >	
3 Yellow, 2 Red	1 minute >	
2 Yellow, 2 Red	1:30 minutes >	
1 Yellow, 2 Red	2 minutes >	
2 Red	3 minutes >	
1 Red	6 minutes >	

Effectively, this represents your **Peak Radiation Dosage.** As you reduce your wireless gadgets your results will shift from red to orange, then into the green—or ideally, no results displayed at all.

If you live near a telecommunications **cell tower/site**, **TV broadcast antenna**, or a **radio broadcast antenna**, the **peak duration score** will always be **red**.

No results (no LED lights) are ideal for **bedrooms and sensitive individuals**. For others, **aim for the green**, for all three RF-X6 results when shielding or mitigating wireless radiation, and seek assistance if needed.

Continuous peak radiation = increased body voltage: However, the longitudinal scalar effect at low radiation levels from short bursts or pulses over six minutes has various biological effects not present in continuous peak radiation. This is why some people struggle more with low-level radiation than with continuous peak radiation. Continuous peak radiation has its own set of characteristics as far as biological effects go.

Notes: RF sensitivity decreases by approximately 0.3 $\mu W/m^2$ in RF-X6 Mode. Read more about RF-X6 Mode [here]

LFM-X Mode: PowerGrid Monitor Mode

This mode monitors the PowerGrid's dynamic background magnetic fields.

The average and highest AC 50/60 Hz RMS magnetic field levels are recorded and displayed on the meter's LED indicators after a 12-hour logging session.

Before you begin, ensure the battery is fully charged.

- 1. Turn on the meter and select **RF Mode**.
- 2. Quickly move the **MODE switch** down to **LFE Mode** and back to **RF Mode** twice, within two seconds. Two lights will start blinking—one orange and one red.
- 3. Move the MODE switch down one click to LFM Mode (RF \rightarrow LFM).
 - The LED lights will sweep left to right for 20 seconds, giving you time to position the meter upright, USB socket facing down.
 (Unless under or over powerlines, then position the meter in the axis with the highest reading, near flat and not upright.)
 - Once activated, step back and do not move, bump, or touch the meter for 12 hours, as the magnetic sensors are extremely sensitive.
- 4. After 12 hours, the average and highest recorded AC 50/60Hz RMS magnetic field values will be displayed:
 - o If no lights are displayed, no values were recorded, meaning no magnetic fields above 10nT were detected.
 - o **Battery Life:** The device lasts **up to 48 hours** in LFM-X Mode—be sure to check the results before the battery runs flat.

 $RF \rightarrow LFE \rightarrow RF \rightarrow LFE \rightarrow RF ---- RF \rightarrow LFM$

See EMF Basics for more measurement and mitigation methods [here]

Notes on Signal Sources

- Some EMF sources in the home, such as cell phones, smart meters, and Wi-Fi emitters (RF signals), change levels very rapidly due to protocol definitions.
- Cell phones adjust their transmission levels based on signal strength from the cell tower and obstacles affecting the signal. (Increased up to 100× in signal strength with just one bar from four bars.)
- Smart meters can send very fast signal bursts every few seconds, or hour/day, depending on the network type, while Wi-Fi routers adjust signal strength based on transfer load.
- Aside from the PowerGrid, LFM and LFE sources are usually more consistent. However, as with RF signals, the device should be rotated in all directions to obtain the highest and most accurate reading—especially at low radiation levels.
- Proximity to transmitters affects accuracy—measuring too close can cause the device to overread.
 For wireless devices, hold the meter at least 12 to 30cm away. This applies to all RF broadband meters.

Reporting & Sample Rate

When in RF mode, peak radiation levels are reported—each update displays the maximum (or peak) level detected since the previous update. Update Rate (Meter LEDs): ~5 times per second

Maintenance & Warranty

Always keep the device away from excessive heat and humidity.

Do not leave the battery on charge indefinitely—charge it fully and unplug once the red charge light turns off to maximise battery life.

Replacement batteries can be ordered through the website or from specialty battery stores. The MITO Meter can also be returned for a calibration check and/or battery replacement.

Meters should remain accurate for five years or more; if in doubt, contact support. **Avoid leaving the device in pockets**, as many end up going through the wash—or even for a swim.

To place a warranty claim, please fill out the contact form on the main page at www.blakes.com.au. This device is covered by a 2-year warranty.

Technical Specifications

MITO METER [EURO]	Version 1.2.07 (RD-10 Custom Build)
RF Frequency range:	100MHz to 8GHz (Roll off up to 10GHz)
RF uW/m2 range via LEDs:	0.5 to 100,000uW/m2
RF uW/m2 range via Software:	0.5 to 2000,000uW/m2
RF measuring range in dBm:	-60dBm to +5dBm
RF Typical accuracy:	±6 dB
RF accuracy @2.4GHz:	±0dB
LFE (Electric Field) Frequency range:	40Hz to 50kHz
LFE measuring range via LED/Software:	1-2 to 1000 V/m with 1V/m resolution
LFE Accuracy	25%
LFM (magnetic Field) Frequency range:	40Hz to 10KHz
LFM measuring range via LED display:	10nT to 2000nT with 5nT resolution
LFM measuring range via Software:	1nT to 5000nT with 1nT resolution
LFM Accuracy	20%
LFM Accuracy @50/60Hz	± 5nT
Sampling Rate	20,000/sec RF Mode
	16,000/sec RF-X6 Mode

Building Biology Evaluation Guidelines

For MITO METER [EURO] Only - (AC) For Sleeping Areas (SBM-2024) ^

			Anomaly	No	Slight	Severe	Extreme
RF Mode	HF	High Frequency	μW/m²*	< 0.1	0.1-10	10-1000	1000 >
LFM Mode	М	Magnetic Fields	nT	< 20	20-100	100-500	500 >
LFE Mode	Е	Electric Fields	V/m**	< 0.3	1-5	5 - 50	50 >

^{*} The meter measures down to approximately 0.5 μ W/m². (Allow for extra distance or shielding.)

^{**} The meter measures down to approximately 1-2 V/m. (Allow 1-2 meters of extra distance from the source at the first green light to account for voltage drop-off.)

[^] For further information: https://buildingbiology.com/building-biology-standard/

RF - Industry Based Limits

Radio Frequency (Pulsed Microwave Radiation) limits by country are mainly established by regulatory agencies influenced by the wireless industry. These limits are based solely on thermal effects in adults and do not account for long-term, non-thermal biological effects across all ages or body sizes.

Note that the Telecommunication industry measure continuous RF exposure using **RMS** (**Root Mean Square**) power levels, not **Peak Power**, as used by Building Biology Professionals. Peak power can be up to 100 times higher than their RMS value on some devices. Cell towers peak power levels vary significantly depending on the transmission type and modulation scheme, often much higher than their RMS levels.

Country/Region	Regulation/Guideline	< 950Mhz (1GHz)	1850Mhz (2GHz) >
International (Australia)	ICNIRP Guidelines	42V/m (4.75W/m², 4,750,000μW/m²)	59V/m (9.25W/m², 10,000,000μW/m²)
Belgium	Belgisch Staatsblad F.2001-1365	21V/m (1.18W/m², 1,180,000μW/m²)	30V/m (2.31W/m², 2,310,000μW/m²)
Germany	Deutsche Verordnung	42V/m (4.75W/m², 4,750,000μW/m²)	59V/m (9.25W/m², 9,250,000μW/m²)
Italy	Decreto n.381, 1998	20V/m (1W/m², 1,000,000μW/m²)	20V/m (1W/m², 1,000,000μW/m²)
Netherlands	Health Council	51V/m (6.92W/m², 6,920,000μW/m²)	83V/m (18W/m², 18,000,000μW/m²)
Switzerland	Verordnung 1999	4V/m (0.04W/m², 40,000μW/m²)	6V/m (0.1W/m², 100,000μW/m²)
United States	IEEE C95.1	49V/m (6.33W/m², 6,330,000μW/m²)	68V/m (12W/m², 12,000,000μW/m²)
United States	IEEE C95.1	49V/m (6.33W/m², 6,330,000μW/m²)	68V/m (12W/m², 12,000,000μW/m²)
Japan	Radio-Radiation Protection Guidelines, 1990	49V/m (6.33W/m², 6,330,000μW/m²)	61V/m (10W/m², 10,000,000μW/m²)
China/Russia	MEP, MIIT Rospotrebnadzor	6V/m (0.1W/m², 100,000μW/m²)	6V/m (0.1W/m², 100,000μW/m²)

Captured Regulatory Agencies

Many first-time EMF meter users are often alarmed by the high levels of microwave radiation they encounter while out and about. This can be attributed to the explosion of wireless connectivity, smart cities, the widespread rollout of cell towers, and the influence of compromised government agencies.

Robert F. Kennedy Jr. (US Secretary of Health & Human Services) along with many others in positions of authority, state that agencies such as the FCC (Federal Communications Commission), ICNIRP (International Commission on Non-Ionizing Radiation Protection), and other national regulatory bodies have been compromised by the wireless industry.

Key Issues with Captured Wireless Regulatory Agencies:

1. Industry Influence on Policymaking:

- Many regulatory agencies rely on research & funding from the telecom industry itself.
- Revolving door between telecom executives and regulatory positions (e.g., former FCC chairmen moving to top telecom companies).

2. Outdated Safety Standards:

- o ICNIRP and FCC guidelines are based on **thermal effects only**, ignoring biological effects such as DNA damage, oxidative stress, and neurological issues.
- Standards were set decades ago before modern pulsed wireless technology (5G, smart meters, and IoT devices) became widespread.

3. Conflict of Interest in Research Funding:

- Many studies downplaying RF risks are funded by telecom companies.
- Independent studies showing harm (e.g., NTP and Ramazzini studies on cancer risks)
 are often dismissed or not considered in policy decisions.

4. Lack of Precautionary Approach:

- Unlike environmental or food safety regulations, RF radiation policies do not adopt the **Precautionary Principle**.
- Countries like Russia, China, and parts of Europe have far stricter RF exposure limits, and measurement methods but Western regulatory bodies resist revising guidelines.

5. Suppression of Dissenting Scientists:

Experts who raise concerns (e.g., Dr. Devra Davis, Dr. Martin Pall, Dr. Henry Lai, Dr.
 Andrew Marino.) often face professional attacks or funding cuts.

The WHO's IARC classified RF radiation as **possibly carcinogenic (Group 2B)** in 2011, yet industry-friendly agencies continue to downplay risks.

For technical support, or general inquiries visit http://www.Blakes.com.au