Mini-Product Catalogue

Making the Invisible Visible

www.SafeLivingTechnologies.com

Formerly WWW.SLT.CO

Your Partner in High Quality EMR / RF Shielding and Measurement Technologies

Safe Living Technologies Inc.
70 Watson Parkway South, Unit #6,
Guelph, ON N1L 0C3, Canada
Tel: 1-888-814-2425
Website: www.SafeLivingTechnologies.com
Email: sales@safelivingtechnologies.com
Looking for a Home EMF Inspection?

Visit our Global Service page:


For pricing please visit
www.SafeLivingTechnologies.com
Formerly WWW.SLT.CO
or contact us directly at 1-888-814-2425.
# Bed Canopies

<table>
<thead>
<tr>
<th>Bed Canopy - Daylite</th>
<th>Hand Made Canopy with Effective Protection Against Radio Frequency and Microwave Radiation. Our most popular, Lightest and most Breathable synthetic fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Bed Canopy</td>
<td>Custom Bed Canopies can be made to desired requirements if requested. Please visit our website or contact us for more details.</td>
</tr>
<tr>
<td>Bed Canopy Floor Sheet - Daylite</td>
<td>Canopy Floor Sheet - Swiss Shield Daylite Fabric - Radio Frequency Protection for below your bed canopy</td>
</tr>
<tr>
<td>Bed Canopy Floor Sheet - Naturell</td>
<td>Canopy Floor Sheet - Swiss Shield Naturell - Radio Frequency Protection for Below your Bed Canopy</td>
</tr>
</tbody>
</table>

## Body Voltage Kit

| Body Voltage Home Test Kit | Easy to Use Body Voltage Test Kit - Measures AC Voltage Present on the Human Body From Live Electrical Wiring in your Ceilings Walls and Floors |
## Power Shutoff Devices

**RCS4 Remote Cut Off Switch + 24 Amp Contactor**  
Turns On and Turns Off Specific Circuits with the Push of a Button. Protection Against AC Electric Fields Including Dirty Electricity as well as Many Other Practical Applications. Includes RCS4 Cut Off Switch, 24 Amp Contactor, 2 Remote Transmitters, Antenna, I/O Cable, Power Supply, Mounting Rail, Installation Guide and Circuit Breaker Stickers

**RCS4 Spare Transmitter**  
Additional transmitter for the RCS4 Remote Cut Off Switch. The switch will need to be paired with your Remote Cut Off Switch by using the program button on the switch itself. Instructions can be found in the RCS4 Manual or on our website

**Antenna – 15 Meter Cable**  
Antenna including a 15 Meter / 49 foot cable to decrease the distance between the antenna and the Remote Cut Off Switch Transmitter. Compatible with the RCS4 Remote Cut Off Switch.

**4 Circuit Contactor – 12VDC, 24Amp**  
The 24 Amp, 12VDC, 4 Circuit Contactor allows our RCS4 Remote Cut Off Switch to control up to 4 branch circuits. One is included with the RCS4, however, additional contactors can be added to control additional circuits with the same Remote Cutoff Switch

**4 Circuit Contactor – 12VDC, 40Amp**  
The 40 Amp, 12VDC, 4 Circuit Contactor allows our RCS4 Remote Cut Off Switch to control up to 4 branch circuits. Additional contactors can be added to control additional circuits with the same Remote Cutoff Switch

**Contactor - 4 Circuit, 24 amp**  
The 24 Amp, 120VAC, 4 Circuit Contactor allows our previous Remote Cut Off Switch to control up to 4 branch circuits. This contactor is valid for our Cut off switches from 2015 and prior

**Contactor - 4 Circuit, 40 amp**  
The 40 Amp, 120VAC, 4 Circuit Contactor allows our previous Remote Cut Off Switch to control up to 4 branch circuits. This contactor is valid for our Cut off switches from 2015 and prior
Demand Switch Mounting Rail
DIN Mounting Rail for Installation of the Contactors - 6 inch

Transmitter – 2015 and Prior

**EMF Meter Accessories**

**Calibration Certificate**
Factory Calibration Certificate with Data - Available for the ME3851A and ME3951A

**EMF/RF Meter Case CC2**
Ensure your EMF and RF Meters and Equipment are Protected During Transport. Add a Hard Plastic Carrying Case Compatible with: ME3030B, ME3830B, ME3840B, HF32D, HF35C EMF/RF Meters by Gigahertz Solutions and the Acoustimer AM-11

**PM1 - NFA EMF Meter Holder**
Fiberglass Holder Used for Potential Free or Ungrounded AC Electric Field Measurements - Compatible with all NFA Series EMF Meters

**Protective Cover – NFACover1**
Protect Equipment Investments with a Flexible soft cover - Compatible with All NFA Series EMF Meters (Yellow in Colour)

**PM5 - ME Mounting Bracket**
Connect a non-conductive pole to this Mounting Bracket for Potential Free or Ungrounded Measurement of AC Electric Fields - Compatible with the ME3030B, ME3830B, ME3840B, ME3851A, ME3951A EMF Meters
<table>
<thead>
<tr>
<th><strong>PM5s - NFA Mounting Bracket</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect a non-conductive pole to this Mounting Bracket for Potential Free or Ungrounded Measurement of AC Electric Fields - Compatible with the NFA1000 and NFA400 EMF Meters</td>
</tr>
</tbody>
</table>

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## EMF Meters / Gaussmeters

<table>
<thead>
<tr>
<th><strong>ME3030B</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>EMF Meters / GaussMeter For Basic EMF Detection Purposes - Measures AC Electric Fields and AC Magnetic Fields - 16 Hertz to 2,000 Hertz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ME3830B</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Selling Entry Level EMF Meters / GaussMeter - Measures AC Electric Fields and AC Magnetic Fields - 16 Hertz to 100,000 Hz - Increased Frequency Range for Dirty Electricity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ME3840B</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Intermediate EMF Meters: This EMF Meter / GaussMeter measures AC Electric Fields and AC Magnetic Fields - 5 Hertz to 100,000 Hertz - Frequency filters for source analysis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>UHS2 AC Gaussmeter</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>This digital Gaussmeter is used to measure AC Magnetic Fields across 1 axis for source location or 3 axis simultaneously for total exposure measurements. The UHS2 measures frequencies between 13 Hz to 75 000 Hz (75kHz)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ME3851A</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable Professional Level EMF Meters. This EMF Meter / GaussMeter measures AC Electric Fields and AC Magnetic Fields – 5 Hertz – 100,000 Hertz - AC and DC data outputs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ME3951A</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional EMF Meters: This EMF Meter / GaussMeter measures AC Electric Fields and AC Magnetic Fields – 5 Hertz – 400,000 Hertz - Highest frequency coverage with increased sensitivity - AC and DC data outputs</td>
</tr>
</tbody>
</table>
### NFA30M
Professional 3D Magnetic Field Meter: This GaussMeter with Datalogging Capabilities measures 3D AC Magnetic Fields - Ships with "NFASoft" Data Analysis Software - Will also log Radio Frequency "RF" Output from the HF59B and the HFW59D (16Hz – 32,000 Hz)

### NFA400
Professional EMF Meter: This meter measures 3D magnetic fields as well as 1D potential free AC Electric Fields (Y-Axis). Ships with "NFASoft" Data Analysis Software - Will also log Radio Frequency "RF" Output from the HF59B and the HFW59D (5Hz – 400 000 Hz)

### NFA1000
The Ultimate EMF Meters: This EMF Meter / GaussMeter with Datalogging Capabilities measures 3D AC Electric Fields and 3D AC Magnetic Fields - Ships with "NFASoft" Data Analysis Software - Will also log Radio Frequency "RF" Output from the HF59B and the HFW59D (5Hz – 1,000,000 Hz)

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## EMF/RF Detectors

### Safe and Sound Classic RF Detector
5G Ready! Unlike any other detector in its price range. Utilizes the same measurement technology as the Safe and Sound Pro II but for a fraction of the cost! Designed by Safe Living Technologies with electrosensitive clients in mind. It is a simple to use detector for Radio Frequency / Microwave Radiation to capture 200MHz to 8 GHz that is sensitive below 1 μW/m2 and requires no previous technical experience

### HF32D RF Detector
Basic RF Detector / RF Meter with Digital Display - Measures Radio Frequency / Measures Microwave Radiation (800 MHz – 2.5 GHz)

### Cornet ED88TPlus
Basic Radio Frequency Detector (100 MHz - 8 GHz), Magnetic Field Detector (50 Hz - 10 kHz) and Electric Field Detector(50 Hz - 50 kHz) This meter also provides sound signature analysis and a frequency counter (100 MHz - 2.7 GHz) for Radio Frequency measurements which will help identify sources of Radio Frequency Radiation

### Acousticom 2
A compact, simple to use detector for Radio Frequency Radiation and Microwave Radiation (200MHz - 8GHz). It uses color coded LED's which correlate to measurement ranges to assess the RF exposure in your environment. The Acousticom 2 also has a sound signature analysis which helps identify RF Sources
### PF5 Pocket EMF Detector
The PF5 Pocket EMF Detector is a compact, simple to use detector to measure Electric and Magnetic Fields (20 Hz - 50 kHz). It uses color coded LED's which correlate to measurement ranges to assess the Electric Field or Magnetic Field exposure in your environment.

## Current Clamp Meters

### AC Current Clamp Leaker - Large
An AC Current Clamp Leaker Meter is designed for measurement of AC Leakage Current from live wires. This is ideal for measuring Current located on your electrical grounding system (most commonly your water pipe) which can result in elevated magnetic fields throughout your home.

### AC Current Clamp Leaker - Small
This smaller AC Current Clamp Leaker Meter is designed for measurement of AC Leakage Current from live wires. This is ideal for measuring Current located on your electrical grounding system in tighter, hard to get to areas (wiring inside electric panel, smaller water pipes, etc.) which can result in elevated magnetic fields throughout the home.

## EMR Detection Kits

### MK5 Electrosmog Test Kit
The MK5 Electrosmog Test Kit contains the Gigahertz Solutions ME3030B EMF Meter and the Safe and Sound RF Detector. This kit is designed for basic testing for EMF and RF exposure.

### MK10 Electrosmog Test Kit
The MK10 Electrosmog Test Kit contains the Gigahertz Solutions ME3030B and the HF32D. Designed for basic monitoring of your personal EMF exposure and RF exposure.

### MK15 Electrosmog Test Kit
The MK15 Electrosmog Test Kit contains the Gigahertz Solutions ME3830B EMF Meter and our Safe and Sound Pro II RF Meter. Designed for a more thorough monitoring of your personal EMF exposure and RF exposure.
**MK20 Electrosmog Test Kit**
The MK20 Electrosmog Test Kit contains the Gigahertz Solutions ME3830B EMF Meter and the HF35C RF Meter. Designed for a more thorough monitoring of your personal EMF exposure and RF exposure.

**MK30 Electrosmog Test Kit**
The MK30 Electrosmog Test Kit contains the Gigahertz Solutions ME3840B and the HF38B. Designed for a more advanced EMF and RF exposure monitoring yet remaining easy to use.

**MK70-3D Electrosmog Test Kit**
The MK70-3D Electrosmog Test Kit is the ultimate EMR test kit. It contains the Gigahertz Solutions NFA1000 3D EMF Meter and the HFE59B RF Meter. Designed for professional use in hospitals, EMR research facilities, EMF testing labs and for all EMF Professionals.

**MK70-3D Plus 1.0 Electrosmog Test Kit**
Contains the contents of the MK70-3D test kit, as well as the HFW59D Plus RF Meter for extended coverage in frequencies ranging from 2.4GHz - 10GHz as well as the PM1 and PM5s to aid in potential free electric field measurements with the NFA1000.

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**Custom Kits are Available**
Design Your Own Kit by Pairing Any EMF and RF Meter
Includes a Free Carrying Case

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**RF Meter Accessories**

**Attenuator DG20**
Extend the Maximum Power of your RF Meter - Increase the RF measurement range by 100x or 20 dB - Compatible with: Standard Log-Per antenna of the HF32D, HF35C and the HF38B

**Attenuator DG20_G10**
Increase the Maximum Power Range of your RF Analyzer (RF Analyser) by 20 dB or 100x - Designed for: Standard Log-Per antenna and the UBB27 antenna of the HFE35C, HFW35C, HF58B, HF58B-r, HF59B, HFE59B, HFW59D
<table>
<thead>
<tr>
<th><strong>EMF/RF Meter Case CC2</strong></th>
<th>Ensure your EMF and RF Meters and Equipment are Protected During Transport. Add a Hard Plastic Carrying Case Compatible with: ME3030B, ME3830B, ME3840B, HF32D, HF35C EMF/RF Meters by Gigahertz Solutions and the Acoustimer AM-11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Pass Filter – HP700_G3</strong></td>
<td>This High Pass Filter will Remove Signals Below 800 MHz from the Measurement Spectrum and Aid with Source Identification - Compatible with: Standard Log-Per antenna and the UBB27 antenna of the HFE35C</td>
</tr>
<tr>
<td><strong>Preamplifier – HV10_27G3</strong></td>
<td>Amplifies Weaker Signals by 10x and Aids with Source Identification - Compatible with: Standard Log-Per antenna or the UBB27 antenna of the HFE35C, HF58B, HF58B-r, HF59B, HFE59B RF Meters</td>
</tr>
<tr>
<td><strong>Preamplifier – HV20_2400G10</strong></td>
<td>Enlarge Weaker Signals by a factor 100x for a more detailed analysis and of low intensity radio frequency sources - Compatible with: Standard Log-Per Antenna, HFW35C and HFW59D</td>
</tr>
<tr>
<td><strong>Protective Cover – RFCover1</strong></td>
<td>Protect your RF Measuring Equipment with a Flexible soft cover - Works with All RF Detectors (RF Meters or RF Analyzers / RF Analysers): HF32D, HF35C, HFE35C, HF38B, HFW35C, HF59B, HFE59B, HFW59B (Black in Colour / Color)</td>
</tr>
<tr>
<td><strong>UBB27 – Omni-Directional Antenna</strong></td>
<td>Explore RF Measurements in 360 degrees from 27 MHz to 3.3 GHz - Compatible with RF Analyzers (RF Analyser): HFE35C, HF59B, HFE59B</td>
</tr>
<tr>
<td><strong>UBB2410 - Omni-Directional Antenna</strong></td>
<td>Explore RF Measurements in 360 degrees from 2.4 GHz to 10 GHz - Compatible with RF Analyzers (RF Analyser): HFW35C, HFW59D, HFEW59D</td>
</tr>
</tbody>
</table>
EMF / RF Meter Case K5
This hard cover plastic case will hold up to 2 Gigahertz Solutions Meters and will help to protect your meters during transport. It can be used for any of the Gigahertz Solutions EMF Meters as well as the HF32D, HF35C, HFE35C, HFW35C, and HFW59D RF Meters.

EMF / RF Meter Case K2
This hard cover plastic case is larger than the K5 Carrying Case and will hold any 2 Gigahertz Solutions RF or EMF Meters and protect them during transport.

EMF / RF Meter Case K7
This hard cover plastic case is the largest case available and has 6 slots for various meters and accessories. This case is included with the MK70-3D professional test kit but it works with any combination of Gigahertz Solutions Meters.

RF Meters

Safe and Sound Pro II RF Meter
5G Ready! - Low & Mid Bands. 3rd Party Certified with +/- 6dB accuracy from 400 MHz to 7.2 GHz, and effective from 200 MHz to 8 GHz! Also includes a premium OLED Display for digital readings up to 2,500,000 µW/m² and down to 0.001 µW/m², Max Hold, Max Reset Button, USB Jack for Continuous Monitoring, Volume Control, Headphone Jack, Calibration Certificate and more!

Acoustimeter AM-11
Easy to use, Extended Frequency range - Measures Radio Frequency / Microwave Radiation (200 MHz – 8.0 GHz) with Audio Signal Analysis, OLED displays peak and average values, LED indicators displays a quick visual of RF intensity.

HF35C RF Meter
Our Most Popular RF Meter - Measures Radio Frequency / Microwave Radiation (800 MHz – 2.5 GHz) Audio Signal Analysis, 10 times more sensitive than the HF32D, Peak Settings and Average Settings.

HF38B RF Meter
Intermediate RF Meter - Measuring Range (700 MHz – 3.3 GHz) Audio Signal Analysis, 10 times more sensitive than the HF35C, Peak Hold Settings, Peak Settings and Average Settings, can measure higher power signals.
HFE35C RF Meter Kit
Versatile Intermediate RF Meter - Measures Radio Frequency / Microwave Radiation (27 MHz – 3.3 GHz) Includes 2 Antennas – standard directional antenna plus omni-directional antenna or 3D antenna

HFE59B RF Meter Kit
Our Best Professional Level RF Meter - Measuring Range (27 MHz – 3.3 GHz) - Includes 2 Antennas - standard directional antenna plus omni-directional antenna or 3D antenna, peak hold feature, data output ports

HFEW35C RF Meter Kit
The HFEW35C RF Meter Kit contains the Gigahertz Solutions HFE35C and the HFW35C. This kit is designed for detecting a large scale of RF Signals ranging from 27MHz to 6GHz

HFW35C RF Meter
Specialized Wi-Fi Meter for Measuring Higher Frequency Sources of Radio Frequency / Microwave Radiation (2.4 GHz – 6.0 GHz)

HFW59D RF Meter
The HFW59D detects Wireless technologies such as Radar, Bluetooth, WLAN, WiMAX and cordless telephones operate in the higher frequency ranges of 2.4 GHz – 10 GHz

HFW59D Plus RF Meter Kit
Professional Level RF Meter - Measuring Range (2.4GHz - 10GHz) with Audio Signal Analysis. This kit includes a standard log-per and an omni-directional antenna which measures 360° as well as the HV20_2400G10 Pre-amplifier

RF Shielding Fabric

Swiss Shield Daylite
Decorative Synthetic Fabric Mesh - Radio Frequency / Microwave Shielding Effectiveness 99.6% or 24 dB at (1000 MHz / 1 GHz) and 97% at (3000 MHz / 3 GHz) - Also known as Swiss Shield New Daylite (Width = 260 cm or 102 inches)
<table>
<thead>
<tr>
<th>Product Name</th>
<th>Description</th>
<th>Shielding Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Swiss Shield Naturell</strong></td>
<td>Premium Natural Eco-US Cotton Decorative Fabric - Radio Frequency /Microwave Shielding Effectiveness 99.99% or 40 dB at (1000 MHz / 1 GHz) and 99% effective up to (10,000 MHz / 10 GHz) (Width= 250 cm or 98.4 inches)</td>
<td></td>
</tr>
<tr>
<td><strong>Swiss Shield Wear</strong></td>
<td>Durable Natural Cotton Fabric Designed for Clothing or Bedding - Shielding Effectiveness 99.7% or 25 dB at 1,000 MHz (Width = 150 cm or 59 inches)</td>
<td></td>
</tr>
<tr>
<td><strong>Swiss Shield Ultima</strong></td>
<td>Swiss Shields Highest Attenuation Non Conductive Cotton Shielding Fabric - Radio Frequency / Microwave effectiveness of 99.992% or 41 dB at (1000 MHz / 1 GHz) and over 99.2% or 21 dB effective up to (10,000 MHz / 10 GHz) (Width= 250 cm or 98.4 inches). Slightly more dense than the Naturell</td>
<td></td>
</tr>
<tr>
<td><strong>Swiss Shield Naturell Ultra</strong></td>
<td>Externally Conductive Premium Cotton Shielding Fabric - Radio Frequency / Microwave effectiveness of 99.99% or 40 dB at (1000 MHz / 1 GHz) and 99% effective up to (10,000 MHz / 10 GHz) (Width= 250 cm or 98.4 inches)</td>
<td></td>
</tr>
</tbody>
</table>

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**RF Shielding Foil**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RF Shielding Foil</strong></td>
<td>Basic Interior Radio Frequency Shielding Protection - Aluminum RF Shielding Foil - Sold in 125 foot rolls, 4 ft wide</td>
</tr>
<tr>
<td><strong>Aluminum Foil Tape</strong></td>
<td>Self-adhesive, Solid Aluminum Tape used to secure the joints between overlapping pieces of RF Shielding Foil. 2” x 150’ (48mm x 45m)</td>
</tr>
</tbody>
</table>
## RF Shielding Mesh

**GS – Grounding Connector Kit**  
Standard grounding connector kit including grounding cable (16 feet / 5 meters) for externally conductive Swiss Shield Fabrics (Swiss Shield Evo-Ultra and Swiss Shield Naturell Ultra), AM1 or AM2 Netting, or RF Shielding Foil

**Signal Protect AM2 Aluminum Mesh**  
Improved Interior and Exterior Radio Frequency Shielding Protection Compared to the AM1 Aluminum Mesh - Sold in 4 Foot Wide Rolls and available in 25, 100 Foot Lengths

## RF Shielding Paint

**Shielding Paint Yshield HSF54**  
RF Shielding Paint, Carbon Based and Corrosion Resistant with an Attenuation of 36 dB per one layer (shielding effectiveness of 99.97 %). Radio Frequency /RF Shielding Paints are available in 1 and 5 Litre Bins

**Exterior Grounding Kit - GE**  
Exterior Grounding Kit for shielding paints, wire mesh, etc.

**Interior Grounding Kit – GS3**  
Standard Interior grounding plate kit for shielding paints, fleeces, etc. Allows 3 connections.

**Interior Grounding Kit – GS2**  
Standard Interior grounding plate kit for shielding paints, fleeces, etc. Allows 1 connection.
<table>
<thead>
<tr>
<th>Grounding Tape – GSX10</th>
<th>With electrically conductive glue. The adhesion of EB2 but the conductivity of EB1! Self-adhesive, conductive fleece grounding tape for use under or on top of shielding paints. 10 meter (32.8 feet) Superior adhesive force 0.8 kg / inch.</th>
</tr>
</thead>
</table>

### RF Shielding Window Film

| Signal Protect - Clear Film | Virtually Clear Radio Frequency Signal Protect Window Film - Transparent RF window shielding / glass shielding to block a wide range of radio frequency and microwave radiation  
Available in 3, 4 and 5 foot wide rolls |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signal Protect - Silver Film | Silver / Reflective Radio Frequency Signal Protect Window Film - Silver tinted RF shielding window film / glass shielding to block a wide range of radio frequency and microwave radiation  
Available in 3, 4 and 5 foot wide rolls |

### Shielded Power Cords

<table>
<thead>
<tr>
<th>Shielded Power Cords - 6 Foot / 12 Foot</th>
<th>Eliminate Unwanted AC Electric Fields from Electronic Devices and Appliances - Shielded AC Power Cords 120 Volt</th>
</tr>
</thead>
</table>

### Magnetic Field Shielding

| G-iron ArmoFlex | Protection against Magnetic Fields - G-iron ArmoFlex - Available Per Linear Foot or by 35 Foot Long Roll - The Rolls are 2 feet wide |
Optical / Light Meters

**OFC-1 Pulsed Optical Frequency Counter**
This meter allows you to identify and analyze pulsed light in the visible and near infra-red light spectrum. Common items to test include computer monitors, TV’s, tablets, cellphones, indoor lighting from different types of lightbulbs etc.

Power Line Meters

**Line EMI Meter**
Power Line Meter which measures high frequency electric fields present on your power lines in milliVolts. It captures frequencies between 10 KHz and 10 MHz. These high frequency electric fields are commonly known as Dirty Electricity.
A Good Night’s Sleep is Just a Switch Away

Remote CutOff Switch - RCS4

Has EMF Exposure Been Keeping You Awake At Night?

When we sleep our beds are surrounded by an invisible curtain of electric and magnetic fields referred to as Extremely Low Frequencies (ELF) or Electromagnetic Frequencies (EMF). These fields are toxic byproducts generated by all wiring, lighting and electrical appliances in our homes. Once installed a demand switch reduces exposure to these fields by conveniently cutting or restoring power as required on the offending bedroom circuits. The result is an effortless, restful, and EMF mitigated sleep.

Consider:
- EMF has been rated as a class 2B; possible human carcinogen by the US Government’s National Institute of Environmental Health Sciences (NIHES) 3

- EMF exposure can lead to a serious reduction in melatonin production. 4,5,6 Melatonin is a powerful neurohormone, produced by the body when we sleep, that:
  - is vital in regulating our bodies’ sleep processes
  - scavenges free radicals in all cells
  - is a potent antioxidant with anti-aging and anti-cancer properties
  - assists in maintaining a healthy immune system and mediates many hormone functions 7

Note: Melatonin disruption is just one example of possible biological impacts related to EMF exposure.
EMF Testing / EMF Assessment / EMF Consulting Services

Safe Living Technologies Inc. offers a comprehensive range of professional consulting services to address EMF and EMI. SLT Technicians are certified and use professional, certified testing equipment which covers a large range of electromagnetic frequencies. 5 Hz – 1 MHz in the Low frequency Spectrum. We also cover high frequency Radio Frequency EMF to be discussed in the Radio Frequency testing section.

EMF Assessments are offered for both residential homes and commercial work places. Every living space and work space is unique. EMF measurements need to be taken at strategic points throughout the home or work place. This information is then used to map out the concentration and sources of EMR and is an essential step for the implementation of protection solutions. No two EMR assessment maps are alike. Once the source is identified and strategies are discussed and implemented to reduce EMF at its source.

Residential EMF Testing
For residential clients we focus on the sleeping areas and areas you spend a great deal of time in. We check for the following:

- AC Magnetic Fields – High voltage power lines, transformers, appliances etc...
- AC Electric Fields – Household wiring, appliances, cables, computers etc...
- DC Magnetic Fields - Building Materials, mattresses etc...
- DC electric Fields – Static Electricity etc...
- Dirty Electricity – Energy Saving Devices, etc...
- Stray Currents on gas and water pipes from electrical wiring errors
- Body Voltage Measurements - shows how much a human body is electrically "charged", if an electric field is present.

Commercial EMF Testing
For Commercial Buildings we focus on:

- Equipment Interference Issues
- Health and Safety Concerns

Equipment we use has 3rd party Calibration Certificates: HFE59B and NFA1000
Electromagnetic Spectrum

### Frequency in Hertz (Hz)

<table>
<thead>
<tr>
<th>DC</th>
<th>ELF</th>
<th>VLF</th>
<th>Radio Frequency RF</th>
<th>Microwaves</th>
<th>Light</th>
<th>Radioactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Hz</td>
<td>3 Hz-30 Hz</td>
<td>3 KHz-30 KHz</td>
<td>3 KHz - 300 GHz</td>
<td>300 MHz - 300 GHz</td>
<td>300 GHz - 30 PHz</td>
<td>30 PHz - &lt;10 EHHz</td>
</tr>
</tbody>
</table>

### Non-Ionizing Radiation

- **Electricity**
  - 60 Hz
- **Dirty Electricity**
  - 2-400 KHz
- **AM Radio**
  - 540-1600 KHz
- **FM Radio**
  - 88-108 MHz
- **TV**
  - 54-805 MHz
- **Cell Phones**
  - 850-2600 MHz
- **WiFi**
  - 2.4 GHz

### Ionizing Radiation

- **IR Visible UV Light**
- **X Rays**
- **Gamma Cosmic**
EMR Exposure Guidelines

### RADIOFREQUENCY / MICROWAVE EXPOSURE GUIDELINES

(High Frequency Electromagnetic Waves)

#### 1. BUILDING BIOLOGY PRECAUTIONARY GUIDELINES (SBM-2015) For Sleeping Areas*

<table>
<thead>
<tr>
<th>Power density (Peak)</th>
<th>No Concern</th>
<th>Slight Concern</th>
<th>Severe Concern</th>
<th>Extreme Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>microWatts per square meter μW/m²</td>
<td>&lt; 0.1</td>
<td>0.1 - 10</td>
<td>10 - 1000</td>
<td>&gt; 1000</td>
</tr>
<tr>
<td>microWatts per square cm μW/cm²</td>
<td>&lt; 0.000,01</td>
<td>0.000,01 - 0.001</td>
<td>0.001 - 0.1</td>
<td>&gt; 0.1</td>
</tr>
<tr>
<td>milliWatts per square meter mW/m²</td>
<td>&lt;0.000,1</td>
<td>0.000,1 - 0.01</td>
<td>0.01 - 1</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Signal strength</td>
<td>Volts per meter V/m</td>
<td>&lt; 0.006,14</td>
<td>0.006,14 - 0.061,4</td>
<td>0.061,4 - 0.614</td>
</tr>
</tbody>
</table>


Biological Working Group, Cindy Sage and David O. Carpenter, Editors. A Rationale for a Biologically-based Public Exposure Standard for Electromagnetic Radiation. Precautionary target level is 3 - 6 μW/m² or 0,000,3 - 0,000,6 μW/cm² (Peak)


In Canada, guidelines for Radio Frequency Wave exposure lay under the jurisdiction of Health Canada. Safety Code 6 was developed in 1999 and offers federal guidelines for safe RF exposure levels. These limits are in the range of 2,000,000 to 10,000,000 μW/m² or 200 to 1000 μW/cm² (Time Averaged) and are based solely on the short term thermal effects or the heating of body tissue. Adverse biological effects have been documented at levels far below Safety Code 6 guidelines. No Canadian biological exposure guidelines exist for long term exposure to low level Radio Frequency Radiation. This also holds true for the USA and their FCC guidelines.

### AC MAGNETIC & AC ELECTRIC FIELD EXPOSURE GUIDELINES

(Low Frequency Electromagnetic Fields ELF, VLF)

#### 1. BUILDING BIOLOGY EVALUATION GUIDELINES (SBM-2015) For Sleeping Areas*

<table>
<thead>
<tr>
<th>AC Magnetic - Flux Density</th>
<th>No Concern</th>
<th>Slight Concern</th>
<th>Severe Concern</th>
<th>Extreme Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>in nanotesla nT</td>
<td>&lt; 20</td>
<td>20-100</td>
<td>100 - 500</td>
<td>&gt; 500</td>
</tr>
<tr>
<td>in milligauss mG</td>
<td>&lt; 0.2</td>
<td>0.2-1</td>
<td>1-5</td>
<td>&gt; 5</td>
</tr>
<tr>
<td>AC Electric Field strength with ground potential in volt per meter V/m TRMS</td>
<td>&lt; 1</td>
<td>1-5</td>
<td>5 - 50</td>
<td>&gt; 50</td>
</tr>
<tr>
<td>Body voltage with ground potential in milliVolt mV</td>
<td>&lt; 10</td>
<td>10-100</td>
<td>100 - 1000</td>
<td>&gt; 1000</td>
</tr>
<tr>
<td>Field strength potential-free in volt per meter V/m TRMS</td>
<td>&lt; 0.3</td>
<td>0.3-1.5</td>
<td>1.5 - 10</td>
<td>&gt; 10</td>
</tr>
</tbody>
</table>

#### 2. BIOINITIATIVE REPORT PRECAUTIONARY GUIDELINES (Aug 31, 2007) [www.bioinitiative.org](http://www.bioinitiative.org)

Biological Working Group, Cindy Sage and David O. Carpenter, Editors. A Rationale for a Biologically-based Public Exposure Standard for Electromagnetic Radiation. Precautionary target level for AC Magnetic Fields 1-2 mG / 100-200 nT. Precautionary target level for AC Electric Field levels are not addressed in the report.

#### 3. CANADA AND USA GOVERNMENT GUIDELINES (1999)

In Canada, guidelines for EMF exposure lay under the jurisdiction of Health Canada. Health Canada has not independently established guidelines for magnetic field or electric field exposure. When pressed, they will state that Canada follows the International Commission on Non-Ionizing Radiation Protection “ICNIRP” guidelines (1998) of 830 mG or 83,000 nT at 60 Hz (Magnetic Field) or 4167 V/m (Electric Field) at 60 Hz for a 24-hour period. Since these guidelines are based on short-term acute exposure we still do not have guidelines that protect the public from long-term low level exposure, which is the case with the distribution of electricity. Associations based on epidemiological studies and cause-effect relationships based on laboratory experiments suggests that exposure to magnetic and electric fields should be thousands of times lower.

*Copyright: Institute of Building Biology + Sustainability IBN, [www.buildingbiology.com](http://www.buildingbiology.com) Baubiologie Maes, [www.maes.de](http://www.maes.de)
## Radio Frequency “RF” Power Density to Volts Per Meter Unit Conversion Chart

<table>
<thead>
<tr>
<th>Volts Per Meter</th>
<th>microWatts/Sq Meter</th>
<th>milliWatts/sq Meter</th>
<th>milliWatts/Sq Centimeter</th>
<th>microWatts/Sq Centimeter</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000,001,94 V/m</td>
<td>0.000,000,01 μW/m²</td>
<td>0.000,000,01 mW/m²</td>
<td>0.000,000,001 mW/cm²</td>
<td>0.000,000,001 μW/cm²</td>
</tr>
<tr>
<td>0.000,006,14 V/m</td>
<td>0.000,000,1 μW/m²</td>
<td>0.000,000,001 mW/m²</td>
<td>0.000,000,0001 mW/cm²</td>
<td>0.000,000,0001 μW/cm²</td>
</tr>
<tr>
<td>0.000,019,4 V/m</td>
<td>0.000,001 μW/m²</td>
<td>0.000,000,01 mW/m²</td>
<td>0.000,000,001 mW/cm²</td>
<td>0.000,000,0001 μW/cm²</td>
</tr>
<tr>
<td>0.000,061,4 V/m</td>
<td>0.000,01 μW/m²</td>
<td>0.000,000,1 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>0.000,000,01 μW/cm²</td>
</tr>
<tr>
<td>0.000,194 V/m</td>
<td>0.001 μW/m²</td>
<td>0.000,001 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>0.000,000,1 μW/cm²</td>
</tr>
<tr>
<td>0.006,14 V/m</td>
<td>0.01 μW/m²</td>
<td>0.000,1 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>0.000,1 μW/cm²</td>
</tr>
<tr>
<td>0.019,4 V/m</td>
<td>0.1 μW/m²</td>
<td>1 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>0.001 μW/cm²</td>
</tr>
<tr>
<td>0.0614 V/m</td>
<td>10 μW/m²</td>
<td>10 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>0.01 μW/cm²</td>
</tr>
<tr>
<td>0.194 V/m</td>
<td>100 μW/m²</td>
<td>100 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>0.1 μW/cm²</td>
</tr>
<tr>
<td>0.614 V/m</td>
<td>1,000 μW/m²</td>
<td>1,000 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>1 μW/cm²</td>
</tr>
<tr>
<td>1.94 V/m</td>
<td>10,000 μW/m²</td>
<td>10,000 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>10 μW/cm²</td>
</tr>
<tr>
<td>6.14 V/m</td>
<td>100,000 μW/m²</td>
<td>100,000 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>100 μW/cm²</td>
</tr>
<tr>
<td>19.4 V/m</td>
<td>1,000,000 μW/m²</td>
<td>1,000,000 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>1,000 μW/cm²</td>
</tr>
<tr>
<td>61.4 V/m</td>
<td>10,000,000 μW/m²</td>
<td>10,000,000 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>10,000 μW/cm²</td>
</tr>
<tr>
<td>194 V/m</td>
<td>1,000,000,000 μW/m²</td>
<td>1,000,000,000 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>100,000 μW/cm²</td>
</tr>
<tr>
<td>614 V/m</td>
<td>10,000,000,000 μW/m²</td>
<td>10,000,000,000 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>1,000,000 μW/cm²</td>
</tr>
<tr>
<td>1942 V/m</td>
<td>10,000,000,000,000 μW/m²</td>
<td>10,000,000,000,000 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>10,000,000 μW/cm²</td>
</tr>
<tr>
<td>6140 V/m</td>
<td>10,000,000,000,000,000 μW/m²</td>
<td>10,000,000,000,000,000 mW/m²</td>
<td>0.000,000,01 mW/cm²</td>
<td>10,000,000 μW/cm²</td>
</tr>
</tbody>
</table>

Formulas: \( V/m = \sqrt{(W/m² \times 377)} \) Volts per meter = the square root of the product of Watts per square meter times 377

Note: V/m and mV/m are rounded
EMR Basics
From the beginning of time, life on earth has adapted to survive in an environment of weak, natural Electromagnetic Radiation. During the 20th century, man-made EMR was introduced to our environment as an unexpected by-product of modern electricity. This type of unnatural EMR was different than what we have been exposed in centuries of the past.

EMR travels at the speed of light and is invisible to humans. It is generally organized by frequency and wavelength. The frequency of EMR refers to the number of times it repeats itself or cycles per second as Hertz (Hz). The wavelength refers to the physical size of the wave and wavelength is inversely proportional to frequency. Extremely Low frequency or ELF, have the longest wavelength and Higher Frequencies such as Radio Frequencies (RF) or Microwaves have a shorter wavelength. These types of EMR are referred to as non-ionizing radiation. The highest frequencies have very short waves and are classified as ionizing radiation. This can be seen in the Electromagnetic Spectrum.

Electromagnetic Radiation includes AC Fields, DC Fields, Magnetic Fields, Electric Fields, RF Waves / Microwaves, Ionizing and non Ionizing Radiation. AC refers to alternating current which continually changes polarity for positive to negative creating a push pull force effect. DC refers to direct current which is a constant continual field or a constant force. RF and Microwaves have alternating field properties but at a much higher frequency. Ionizing radiation is composed of particles that individually have sufficient energy (or can liberate sufficient energy) to remove an electron from an atom or molecule.

What are AC Electromagnetic Fields?
An AC electromagnetic field, also known as EMF or EM field, is a physical field produced by moving electrically charged objects. It affects the behavior of charged objects in the vicinity of the field. The field can be viewed as the combination of an AC electric field and an AC magnetic field. Since it is AC by definition, it continually changes polarity from positive to negative.

AC Electric Fields: AC Electric Fields (E-Fields) are produced by the presence of electricity. Their strength is determined by voltage; the higher the voltage, the stronger the field. AC Electric Fields are generated by live electrical wires and generally travel 6-8 feet from the source, but in some cases further. An electric field will exist even when a device is not in use (turned off). In other words, these sources produce a continual emission. AC Electric Fields have a natural attraction to ground and the human body. They are considered low frequency electromagnetic radiation. (5 Hz – 400,000 Hz). They can be measured with an AC Electric Field meter and the unit of measurement is Volt per meter V/m.

AC Magnetic Fields: Living spaces contain dozens of electronic devices and electrical appliances. When this equipment is active or turned on, a flow of electrical current begins. This flow of electricity through the equipment and wiring is responsible for creating AC Magnetic Fields (B-Fields). The intensity or strength of the magnetic field is directly related to the power consumption of the device. A more powerful device will produce a higher magnetic field. These fields usually remain close to their source (2-3 feet), but can travel several hundred feet; an example is in the case of high voltage power lines. AC Magnetic Fields are considered low frequency electromagnetic radiation. (5 Hz – 400,000 Hz). They can be measured with a tesla meter in nanoTesa (nT) or with a gauss meter in milliGauss mG. Note: An AC Magnetic Field is typically what people refer to as EMF but this is an inaccurate statement.
What is RF and Microwave Radiation?

Radio Frequency “RF” Waves: The use of Radio Frequency “RF” Wave technology plays an integral part in our daily lives. As AC Electric fields and AC Magnetic fields approach higher frequencies, the fields become airborne and in this condition become Radio Waves. Microwaves are simply higher frequency radio waves. RF waves are used to convey information from one place to another through the air. They are used in mobile communication, radio and television broadcasts, radar, satellite navigation, homeland security and are a significant part of what we recognize today as an international communication infrastructure. These high energy, airborne waves, are capable of traveling miles. RF waves are considered high frequency electromagnetic radiation (10 MHz -300 MHz). Power density readings in microwatts per square meter µW/m² are often used to express the magnitude of the signals. A spectrum analyzer is used to identify the specific frequency of a signal.

Electromagnetic Hypersensitivity “EHS” or Electrical Sensitivity

Technology is changing at a staggering pace. We are now exposed to forces and energies that did not exist decades ago. Many new diseases and sicknesses have developed since our parent’s generation including Electromagnetic Hypersensitivity “EHS” and new types of cancer. Both may have links to long term, low level, exposure to Electromagnetic fields “EMF” and radio-frequency waves “RF”. EMF is a man-made pollutant that consists of AC Electric Fields and AC Magnetic Fields. It is produced from live electrical wiring, electric appliances and electronic devices. RF waves are produced by all wireless communication products.

AC Electric Fields, AC Magnetic Fields and RF radiation are invisible yet exist everywhere. They are detrimental to our health and it is necessary to reduce prolonged exposure. Safe Living Technologies specializes in electrical pollution detection and mitigation. We have the technology and instrumentation to detect and eliminate these unwanted fields.

Symptoms of EHS

**Neurological**: headaches, dizziness, nausea, difficulty concentrating, memory loss, irritability, depression, anxiety, insomnia, fatigue, weakness, tremors, muscle spasms, numbness, tingling, altered reflexes, muscle pain and joint pain, leg pain or foot pain, “Flu-like” symptoms, fever. More severe reactions can include seizures, paralysis, psychosis and stroke.

**Cardiac**: palpitations, arrhythmias, pain in the chest or pressure in the chest, low blood pressure or high blood pressure, slow heart rate or fast heart rate, shortness of breath.

**Respiratory**: sinusitis, bronchitis, pneumonia, asthma.

**Dermatological**: skin rash, itching, burning, facial flushing.

**Ophthalmologic**: pain in the eyes or burning in the eyes, pressure in the eyes or pressure behind the eyes, deteriorating vision, floaters, cataracts.

**Others**: digestive problems, abdominal pain, enlarged thyroid, testicular pain / ovarian pain, dryness of lips, dryness of tongue, dryness of mouth, dryness of eyes, great thirst, dehydration, nosebleeds, internal bleeding, altered sugar metabolism, immune abnormalities, redistribution of metals within the body, hair loss, pain in the teeth, deteriorating fillings, impaired sense of smell, ringing in the ears, sensitivity to sounds and light, infertility.