

SPECIAL REPORT: SIX WAYS TO TROUBLESHOOT IN LOCAL AREA NETWORKS

November 2016

Electrical

Products & Solutions

The Purchasing Guide for Electrical Contractors

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Could Electromagnetic-Field Sensitivity be the New Tobacco?

Building biologists improve health protection with new radiation detection and filter services

By Douglas Glenn Clark

Decades ago when society considered the health risk of tobacco addiction manufacturers could argue that there was no scientific evidence that linked smoking to lung cancer. Now a new debate that bears a striking resemblance has emerged and experts worry that modern nations have not yet awakened to the pervasive biological damage that may be caused by electromagnetic-field (EMF) toxicity.

Yes, that means Wi-Fi, smart meters, cellphones and the antenna towers built to service these communication needs are producing harmful radiation. In addition to wireless, another form of EMF pollution, dirty electricity, is radiated from alternating current (AC) circuitry in homes and businesses. How big is the concern? Big enough to spawn a new industry that offers sophisticated detection tools and EMF filtering services.

If research is not entirely conclusive, whistle-blowers point to the many peer-reviewed studies that indicate EMF toxicity possibly increases the likelihood of autism, childhood leukemia, adult brain cancer, Lou Gehrig's disease, and miscarriages while acute symptoms of headache, fatigue and insomnia abound.

Beginning as early as 1972, the Naval Medical Research Institute revealed that personnel exposed to radio frequency and microwave radiation had reported troublesome health effects such as sleeplessness, brain fog, headaches, depression, heart problems, skin rashes and muscle fatigue. Often, physicians cannot explain the increase in these types of non-contagious symptoms. Funding to explore this issue was not provided.

Meanwhile, the U.S. National Institute of Environmental Health Sciences (NIEHS) concludes that scientific evidence is weak, and therefore EMF exposure should not be included in discussions about the ill-effects of tobacco and other products that



Installed at the breaker panel the Power Perfect Box reduces EMFs by up to 99% and THD up to 98% depending on the system.

are now known to be health hazards. It should be noted that it took many years before cigarettes were confirmed as a life-threatening habit.

Experts like Eric Windheim, a certified electromagnetic radiation specialist and building biology environmental consultant, sees at least two challenges to unmasking the truth: Institutions move slowly, and both corporate entities and governments under-

standably like the profits (and taxes) that emerging technologies provide. He also understands the human desire for cellphones and other wireless innovations.

"People love their cellphones. Wireless devices are empowering, very convenient, and profitable," he says.

Although EMF damage has been in existence only about 125 years, Windheim cites many studies and historical data to back his beliefs. For example, distributed electricity was a new phenomenon when it was first provided to cities. Shortly thereafter, life spans began to decline among urban dwellers. This was not the case for farm families where power lines were not yet available. That changed after World War II when rural residents could finally bask in the glow of electric lightbulbs.

"Electricity flies through space as a wave form. It has an impact when it hits things, including people. Studies and statistics show that the biological impact is harmful," he says.

These days the use of wireless networks and devices is expanding at a pace unimaginable in the previous century. Therefore, the one thing both sides of the debate can agree on is that there is a huge hunger for the pervasive use of the innovative technology in classrooms, hospitals, businesses and homes. The explosion of wireless communications means children whose bodies have not fully developed, and workers in a host of industries, are regularly exposed to EMF radiation.

EMF experts say the goal is not to stop the growth of new technologies but to expand awareness of the ramifications of exposure. Teaching human beings how to minimize exposure is

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also essential. But true remediation can't happen until every person, household and business makes an effort to detect and measure the source of the problem.

Fortunately, instruments and tools have been developed for this purpose. Experts like Windheim believe they will help convince society that the EMF controversy is real and fixable.

Solutions, Dirty Electricity

Since peer-reviewed studies indicate that sleep improves when bedrooms are cleaned of radiation sources, Windheim recommends removing computers and turning off cellphones when not in use or forward incoming calls to a landline telephone when at home. But keep in mind that even a cordless telephone base produces microwave radiation 24 hours per day.

Other methods of reducing EMF exposure in the home, include using a cable connection only to surf online. Otherwise, Windheim suggests homeowners turn off their in-home Wi-Fi networks when not in use.

"In my opinion, EMF exposure is the new tobacco," he says. "I'm basically a house doctor. I help people create a safe haven in an electromagnetic world. I recommend changes be made now, before the debate catches up to the problem."

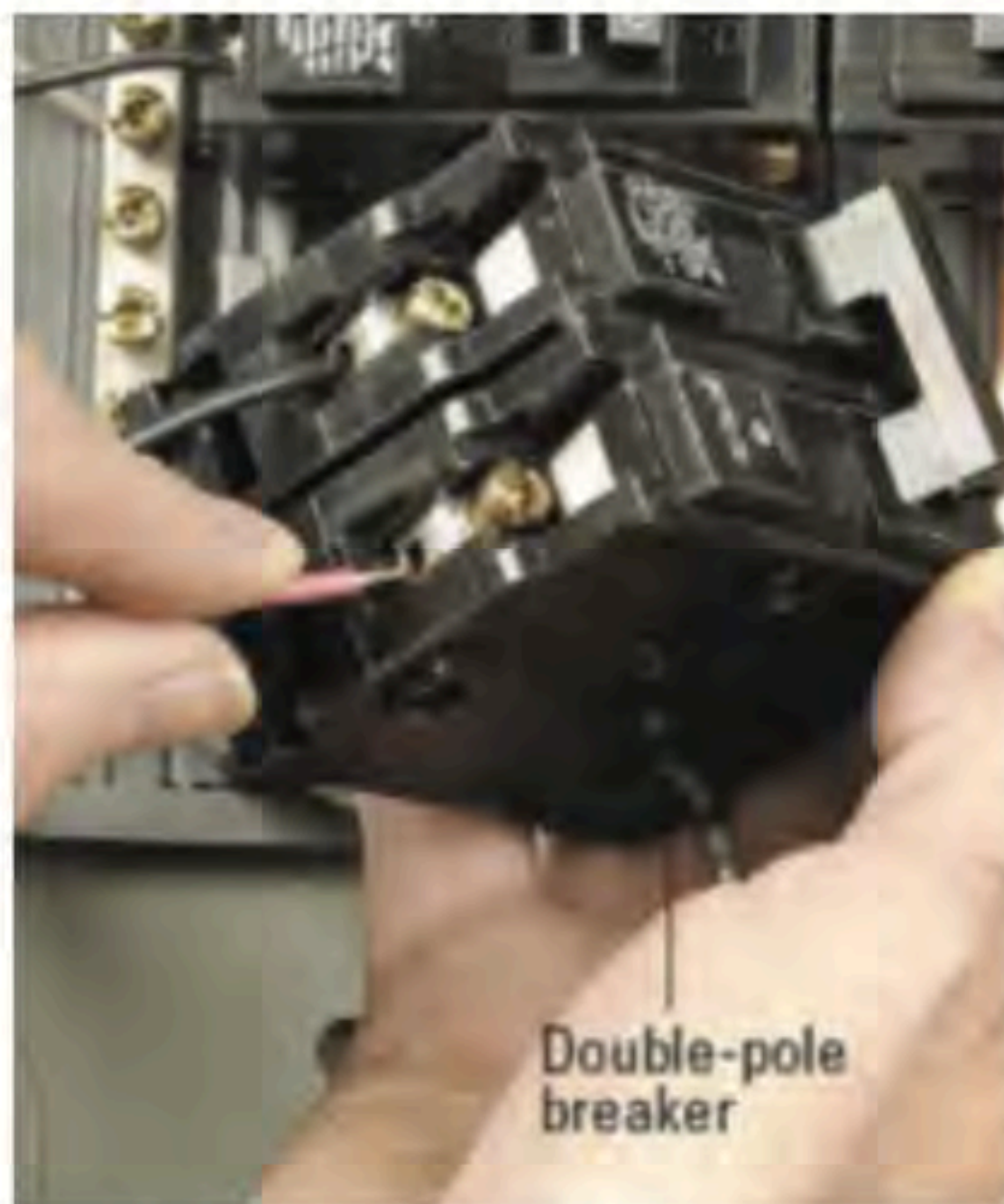
After making changes to reduce contact with airborne radiation at home, building biologists say homeowners would be wise to install certain electric power management systems such as the Power Perfect Box by American manufacturer Satic USA. This particular system reportedly can reduce "dirty" electricity by as much as 90 percent.

Dirty electricity, or power, is common throughout the United States and caused by the disruption of AC. Most homeowners experience this through energy surges, spikes, interference or distortion when, for example, television reception turns fuzzy after a vacuum cleaner is turned on. Other examples include popping or clicking sounds heard on audio speakers when a kitchen appliance cycle changes. This radiation is emitted through electrical panels, circuit wiring and appliances.

Homeowners can't see dirty power unless they use tools now available to mea-

sure its presence. A Gigahertz Solutions NFA1000 3D EMF Meter indicates wiring code violations that are the cause of magnetic fields and its data is sophisticated enough to be used in legal debates. This device also measures the amount of EMF pollution on a person's body caused by wires in the walls of a home. By reducing or eliminating the field, Windheim says homeowners sleep and rest better, and they heal faster from various ailments. To measure dirty electricity, use a Stetzer Meter and to visualize the frequencies, voltage amplitude and waveforms use a specially filtered oscilloscope.

Windheim tested the Power Perfect Box



Since the device delivers whole-home surge protection, it extends the life of electronics and appliances, decreasing maintenance and replacement costs.

after a recommendation by a colleague. The product protects against spikes, surges and sags—short-term decreases in voltage levels—and comes with a 10-year product warranty. When installed at the main electrical panel, it can protect an entire house. He was impressed with its effectiveness.

"The Satic unit is preferred by several other building biologists. When I installed it at the main power panel I discovered that it will typically knock down dirty electricity by 90 percent. Our overall goal is to minimize the amount of exposure to manmade electromagnetic radiation. Satic helps us do that."

Another advantage of the device's

whole-home surge protection is extending the life of electronics and appliances, decreasing maintenance and replacement costs. Under normal circumstances electronics dissipate excess power from the electric panel as heat, which can shorten their lifespan. The power conditioning device turns this wasted heat energy into real working power. In doing so, it extends the life of everything from a solar inverter to the TV, refrigerator, and air conditioner, thus avoiding premature replacement.

Depending on the size of the problem, the cost of detectors and EMF remediation may set back some homeowners thousands of dollars. But Windheim often responds by reminding consumers that "It's a fraction of the cost to stay in a hospital oncology unit. Take your pick."

Another irony is that homeowners don't realize radiation can be a by-product of good intentions. For example, installation of solar panels may reduce a utility bill, yet Windheim says it may do more harm than good.

"Any AC/DC inverter will by design create high frequency transients on every wire in your home, and this spews a lot of dirty electricity into your environment."

Also, be aware that smart meters may be a convenience for the utilities that install them on homes and apartment buildings, but these wireless devices that transmit data use microwave radiation to do so. Some homeowners have demanded that the meters be removed and replaced with analog meters. If that is not possible, the Satic USA Perfect Power Box can detect and remove the voltage transients—more dirty power—the devices can emit.

"While researchers, government institutions and corporations debate the hazards, we all need to do everything we can to protect the health of our families," Windheim says. □

For more information about the Power Perfect package and other products, contact Satic USA at (866) 997-2842, (406) 493-1861, info@saticusa.com or visit <http://www.saticusa.com>.

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