How to Compare the *Magnetic Pulser* to Other Units

There are a number of Magnetic Pulser units on the market today – some are based on the same technology as the SOTA unit, while others use a different approach. Because of the number of units out there, it would be impossible for us to comment and compare them fairly and accurately to our own unit. We can, however, offer a few guidelines that can be used when you are comparing Magnetic Pulser units.

Any values stated (such as Gauss, voltage, etc.) should be backed up by scientific testing. The manufacturer should be able to provide you with the name of the testing equipment used and the equipment should be suitable for that purpose. Proper testing equipment is expensive – it is reliable and accurate in the results that it provides. Less expensive equipment may give inaccurate results, which cannot be relied on. For example, the correct Gauss Meter must be used to capture the actual Gauss output.

Many manufacturers use inferior meters that simply do not and cannot accurately measure the fast DC magnetic field output. SOTA uses the F.W. Bell 5080 Tesla Meter. Other low-cost economy Gauss meters like the Tri-Field meter, simply cannot take accurate readings of the output of these types of DC magnetic pulsers.

Over the years SOTA has tested a number of magnetic pulse units made and advertised by several manufacturers – many of the units claimed to have extremely high Gauss outputs. When tested with the F.W. Bell 5080 Tesla Meter all of these units failed to meet the Gauss output they claimed.

For example, one manufacturer claimed their unit output 50,000 Gauss. When tested with the F.W. Bell 5080 Tesla Meter, the actual and true output was only 1,080 Gauss. This is almost 50 times less than what was claimed and advertised.

Another manufacturer claimed their unit was capable of outputting 30,000 Gauss. When

measured with the F.W. Bell 5080 Tesla Meter, the actual and true output was only 800 Gauss. Again, far lower than what was claimed and advertised.

So, why the difference? Likely, it is due to a misunderstanding of how Gauss is measured and calculated. Improper test equipment could be a factor, but more than likely, these units are getting their Gauss measurements not from testing equipment, but by using a formula that only provides theoretical values. When SOTA used this same formula, it put the Gauss of our unit at greater than 43,000 Gauss – whereas the measured value was actually 6,000 Gauss at the face of the coil. This is why one cannot rely on a formula for electrical specifications – one needs to do real and actual testing with the correct test equipment.

There could also be a misunderstanding of basic electronics and electronic circuitry by many manufacturers. For example, one manufacturer doubled the number of capacitors in their unit and reported that doing so doubled their gauss output. The two capacitors used in the unit were each rated at 350 VDC, 560uF, which when compared to the SOTA unit that has a 450 VDC, 600uF capacitor, it erroneously appears as if the output would be more than the SOTA Magnetic Pulser. When the unit was tested however, it was found that while the unit charged each capacitor to 330 Volts, it was only firing one capacitor at a time. In other words, one capacitor was firing (releasing) its charge while the other capacitor was charging. The capacitors were never firing at the same time. The measured gauss of the unit was 5,090 at the face of the paddle, as compared to the 6,000 gauss at the face of the SOTA paddle.

A second component of magnetic pulse units is the polarity of the hand paddle or coil. Each magnet and magnetic field has both a North and South Pole. However, there is a lot of confusion as to the correct method to identify and label the Poles. SOTA uses the Bio-magnetic method of labeling the polarity of the Magnetic Pulser hand paddle, in accordance with some of the experts in the field of using magnetics for health. Because of the confusion around identifying and labelling the Poles, other manufacturers may label their units differently.

An explanation of Magnetic Polarity, how SOTA has labelled the Hand Paddle of the Magnetic Pulser and how to test the Polarity of a unit can all be found in the Magnetic Polarity article.

Magnetic Polarity

Most of the units we have tested over the years were sent to us by people who had purchased them and wanted to make sure they worked according to the Physicist who designed the Magnetic Pulser.

Whenever we come across a unit from another manufacturer whose actual output is different from the advertised output, we get in touch with that manufacturer to let them know our findings. We do not make these findings public. To date, with the exception of one, all manufacturers we have contacted have not changed their advertising nor have they indicated they had independent testing done to verify their advertised numbers.

SOTA offers a testing service for manufacturers to test their units. We use our testing equipment to give accurate, true and unbiased results. We offer this in an effort to help ensure that all units based on the original protocol meet the standards of the protocol.

When comparing Magnetic Pulsers, it is important to not only compare the electrical specifications of the units but also to compare any external testing, certifications or testing standards that the units have or have not met.

The SOTA units have been CE approved and are RoHS compliant.

CE is a European standard that ensures a product meets certain regulatory standards set by the European Union. Having CE on the units ensures products are safe to use and do not output hazardous levels of EMRs (electromagnetic radiation, like cellular phones do).

RoHS is the Restriction of use of Hazardous Substances and is again, a European standard. In order to be RoHS compliant, electronic products must not use any of the following six substances: Cadmium (Cd), hexavalent Chromium (CR VI), Lead (Pb), Mercury (Hg), polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE).

It is very important to make an informed and intelligent decision before purchasing any equipment. Be willing to ask the manufacturer for the test data. They should have this data readily available and be ready to share it. Unfortunately, what we have seen from our testing experience is that what you think you are buying is not always what you are actually receiving.