

Wireless Energy Transmission Prize

\$100 to the first person to achieve 1% efficiency!

BACKGROUND:

Nikola Tesla was awarded a patent for his Apparatus for Transmitting Electrical Energy in 1914 as US Patent # 1,119,732

<http://hot-streamer.com/TeslaCoils/OtherPapers/TeslaPatents/us001119732.pdf>

<http://hot-streamer.com/TeslaCoils/OtherPapers/TeslaPatents/us000649621.pdf>

More details of his work are available in many sources such as:

<http://www.amazon.com/Nikola-Tesla-Colorado-Springs-1899-1900/dp/0913022268>

<http://hot-streamer.com/temp/0611063.pdf>

PURPOSE:

To demonstrate the efficiency of Tesla's system, a prize has been setup up of \$100 to be given to the first person to demonstrate a 1% or greater efficiency in an actual modern working model of Tesla's Wireless Energy Transmission system.

RULES:

1. No cheating.
2. Both the transmitter and receiver shall have a size defined as being able to fit inside a spherical volume of radius r which is known and is limited to $0.1 < r < 2.0$ meters.
3. The transmission distance between the surfaces of the spherical volumes of the transmitter and receiver must be at least $10 \times r$.
4. The minimum received power shall be at least 1 watt sustained for 60 seconds.
5. The operating frequency shall be between 1 Hz and 10MHz.
6. Ground wire between the transmitter and receiver is allowed but it must be center grounded to Earth and power ground. The transmitter and receiver must also be grounded to the Earth and power ground within the spherical volume.

7. The power of the transmitter will be measured with a suitable "real power" watt meter or equivalent measurement system. A typical example is:

<http://www.google.com/search?q=kill-a-watt>

8. The received power will be measured across a fixed resistance as a RMS voltage or current. Typically this would be done with an oscilloscope or other suitable equipment. The minimum received power shall be at least 1 watt.

9. "Non-active" equipment such as meters, lights, power supplies, fans, test equipment, etc. can be external to the spherical volumes.

10. The winner must disclose all details of the system for verification and to help further the art. This should include pictures, dimensions, voltages, equipment used, etc. Third party verification is highly encouraged!

11. Judges, committee members, prize financiers, etc. are not eligible.