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**For immediate release**

## World Thermal Flowmeter Market Exceeds \$150 Million, Flow Research Study Finds

Wakefield, MA (November 10, 2014) — According to a recent study from [Flow Research](http://www.flowresearch.com), the market for thermal flowmeters totaled \$154 million in 2013, and is projected to grow to almost \$200 million by 2018. A new age of environmental awareness, together with the Kyoto Accord and other greenhouse gas initiatives, has resulted in a rewriting of the rules on measuring greenhouse gas emissions. There is suddenly a need and demand to measure greenhouse gases in applications that formerly may have gone unnoticed. Many of these applications present opportunities for thermal flowmeters, which are mainly used to measure gas flow.

In the early 1990s, new environmental regulations began requiring companies to detect and reduce the emission of sulfur dioxide (SO<sub>2</sub>) and nitrous oxide (NO<sub>x</sub>) into the air. SO<sub>2</sub> and NO<sub>x</sub> are two principal causes of acid rain. The Environmental Protection Agency (EPA) initiated a program to reduce pollution in the atmosphere. It is possible to determine how much of these substances are released into the atmosphere by combining a measurement of the flowrate with a measurement of the concentration of SO<sub>2</sub> and NO<sub>x</sub>. EPA regulations have resulted in the development of an entire industry around the introduction of Continuous Emissions Monitoring Systems (CEMS).

In response to CEMS requirements, thermal flowmeter companies developed multipoint thermal flowmeters. In many cases, continuous emissions monitoring occurs in large stacks that emit pollution from industrial sources. Single point thermal flowmeters measure flow at a point, making it difficult to accurately compute flow in a large pipe or smokestack. Multipoint thermal flowmeters measure gas flow at multiple points, and use these values to compute flow for the entire pipe, duct, or stack. Some multipoint flowmeters have as many as 16 measuring points.

While the need for CEMS is ongoing, the 21<sup>st</sup> century has brought new environmental awareness and requirements. Scientific thinking has evolved substantially in the past ten years. While global warming and the need to reduce carbon emissions were once viewed as scientific theory, they are now widely accepted as scientific fact. And in the United States, the US government has made a commitment to reduce greenhouse gas emission 80 percent by 2050. This administration is also pledging to make the United States a leader in climate change.

It is not just the United States that is working to reduce greenhouse gas emissions. The Kyoto Accord, an international treaty designed to reduce greenhouse gas emissions internationally, resulted in the creation of several mechanisms that require measurement of greenhouse gases. These include Certified Emission Reductions (CER), which allow carbon emitters to gain credits for carbon emitted elsewhere. Another program is the Clean Development Mechanism (CDM), which allows countries to invest in sustainable development projects that reduce emissions in developing countries.

According to Dr. Jesse Yoder, president of Flow Research, the new age of environmental awareness is presenting major opportunities for thermal flowmeter suppliers:

There are currently many new applications for thermal flowmeters. These include measurement and recovery of landfill gas, biomass gasification, measuring and monitoring of flare gas flow, and recovery of methane from coal mines. These and other greenhouse gas-related applications will help propel the thermal flowmeter market into significant growth over the next several years.

The thermal flowmeter market size and forecasts are part of a new research study from Flow Research, *Volume X: The World Market for Flowmeters, 5<sup>th</sup> Edition* (<http://www.flowvolumex.com>). This study includes 12 flowmeter types, and covers both new-technology and traditional technology flowmeters. Thermal flowmeters are included among the new-technology flowmeters.

### **About Flow Research**

Flow Research, with headquarters in Wakefield, Massachusetts, is the only independent market research company whose primary mission is to research flowmeter and other instrumentation products and markets worldwide. Flow Research specializes in flow measurement devices, and conducts market research studies in a wide variety of instrumentation areas that can be purchased by anyone interested in the topics. These studies are developed through interviews with suppliers, distributors, and end-users. Topics include all of the flowmeter technologies - both new and traditional - as well as temperature sensors, temperature transmitters, level products, and pressure transmitters. The company has a special focus on the energy industries, especially on oil and gas production and measurement.

For more information, visit <http://www.flowresearch.com> or call +1 781 245-3200. For information on the thermal flowmeter studies, visit <http://www.flowthermal.com>.

### The World Market for Thermal Flowmeters (Millions of Dollars)

