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**For immediate release**

## **New Flow Research Study Finds Shift to Non-Contact Temperature Sensors**

Wakefield, Massachusetts, August 23, 2006 — A new research study finds several important shifts occurring in the temperature sensor market. The study, called **The Market for Temperature Sensors in the Americas, 2<sup>nd</sup> Edition**, was researched and published by Flow Research. The temperature sensor market in the Americas totaled \$620 million in 2005, according to this study. Revenues from sales of temperature sensors in the Americas are projected to increase at a compound annual growth rate (CAGR) of 4.2 percent through 2010, when they are expected to reach \$760 million.

One important technology change is the shift away from contact temperature measurement to non-contact measurement. This involves a shift away from thermocouples, RTDs, and thermistors to infrared thermometers and fiber-optic temperature sensors. Infrared thermometers are a form of non-contact temperature measurement, while fiber-optic temperature sensors have both contact and non-contact varieties.

In addition to the shift towards non-contact temperature sensors, there is a broader shift away from thermocouples. Thermocouples typically are less accurate and stable than

RTDs and thermistors. End-users who wish to achieve greater accuracy and stability in their temperature measurements can either switch to a different type of contact sensor, such as an RTD or thermistor, or can go to a different technology altogether such as infrared or fiber optic. Some temperature measurements, such as the temperature of moving objects, cannot be made by contact methods. Even so, thermocouples do maintain some advantages in high temperature environments, and they are still the most widely used method of temperature measurement in industrial markets.

According to Dr. Jesse Yoder, president of Flow Research, other changes are occurring as well. “It is interesting to compare the temperature market today to the temperature market of 2000. Some changes that were going on then are still occurring now, like the shift from wirewound to thin-film RTDs. But other changes are occurring, like the development of fiber-optic temperature sensors and the further development of infrared thermometers. In addition, a great deal of consolidation has occurred in this market.”

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Flow Research ([www.flowresearch.com](http://www.flowresearch.com)) is a market research company that specializes in flow, pressure, and temperature. Besides the 400-page study, [\*The Market for Temperature Sensors in the Americas, 2<sup>nd</sup> Edition\*](#), current study topics include differential pressure flowmeters, primary elements, vortex flowmeters, magnetic flowmeters, and temperature transmitters. Flow Research has a website devoted to temperature, which is [www.tempflows.com](http://www.tempflows.com). Charts available upon request.

**Figure 1**  
**Total Shipments of Temperature Sensors in the Americas**  
**(Millions of Dollars)**

CAGR = 4.2 Percent

