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PRESS RELEASE

Exergen SmartIRt/c's are The Intelligent Choice when it comes to Accuracy In Your IR Temperature Measurement

Exergen Corporation, the leading manufacturer of infrared temperature sensors, presents a new family of SmartIRt/c sensors, offering users a complete, compact, cost-effective, general-purpose alternative to other methods of temperature measurements. Outdoing all of the competition, Exergen SmartIRt/c's have these Intelligent Features:

- 1. All digital system** – Average IR temperature sensors have outputs determined by analog circuitry, the *SmartIRt/c*'s outputs and signals are decided upon as a result of purely digital computation by a microprocessor. Drift and environmental concerns are thus avoided.
- 2. Powerful Processor** - The *SmartIRt/c* is centered around a high-speed, state-of-the-art microprocessor that continuously monitors and adjusts the complete system. While performing the complex algorithms determining the output, it also calibrates itself approximately once every second removing any concerns over drift or sudden changes.
- 3. Smart Air Purge** - Integral design prevents dust, dirt, or condensing vapors from depositing on sensor optics, assuring long term accuracy under all environmental conditions. Integral heat exchanger automatically warms (or cools) supply air to match the optical aperture temperature, eliminating drift.
- 4. Smart Emissivity Shift Compensation** - Standard assumption for conventional IR sensors is constant emissivity with change in material surface temperature. Real materials, however, do not behave this way. On average for nonmetals, the emissivity reduces by 3% for every 100°C increase in material temperature. The *SmartIRt/c* is programmed to automatically shift the expected emissivity by this amount, and thus improve the accuracy.
- 5. Smart Housing** - Withstands mechanical shocks >100g, thermally conductive casting maintains uniform temperature.
- 6. Smart Continuous Auto-Calibration** - Recalibrates sensor electronics once per second automatically, eliminates electronic drift that causes inaccuracies

7. Automatic Self-Diagnostics - Providing a complete set of diagnostics and status information, the *SmartIRt/c* is continuously monitoring itself, the target and the environment. While performing a continuous auto calibration, it will output a set of signals informing the user if there is a problem. Thus, the user or control system has complete knowledge of the unit's condition.

8. Smart Six-Variable Calibration - While other IR sensors will calibrate for gain and offset, the *SmartIRt/c* takes into account not only the first order effects but also second order effects including sensitivity coefficients. No sensor has experienced such an in-depth evaluation and been subjected to this procedure. The end result provides the best possible accuracy under all operating conditions.

Exergen *SmartIRt/c*'s are the intelligent choice, if you are looking for improvements in accuracy from your conventional IR sensor. They are also cost effective, with plenty of bang for your buck!

About Exergen

Exergen Corporation, located in Watertown, MA, designs and manufactures infrared temperature sensors designed for the performance of fast, accurate and non-invasive temperature measurements used in virtually all industries. Exergen's commitment to innovative temperature control technology continues to help customers meet or exceed their production requirements.

For more information about Exergen *IRt/c* non-contact temperature technology, please contact: Bob Harris, Exergen Corporation, 400 Pleasant Street, Watertown, MA, 02472; Call 800-422-3006, ext 6238; Fax 617-923-9911; or e-mail industrial@exergen.com.

Information is also available on the company's website at <http://www.exergen.com/industrl/smartirtc/index.htm>