

Speciality Controls and Data Acquisition for IRt/c's

For control applications, the IRt/c will perform very well with standard thermocouple input devices: temperature controls, data acquisition equipment, transmitters and t/c input cards for PLCs.

For those who wish to expand or enhance the temperature measurement capabilities of the IRt/c, there are numerous third-party solutions offered. This list is by no means complete. It is only meant to be representative of the flexible signal processing power of the many new thermocouple input products being offered by manufacturers. For more information, please contact the suppliers listed here, Exergen, or your local Factory Authorized IRt/c Distributor.

Temperature Controllers and Indicators

Eurotherm Series 2000 Temperature Controllers and Indicators

The Eurotherm 2000 Series Temperature Controllers and Indicators, manufactured by Eurotherm Controls Inc., are available with standard IRt/c linearization. OEM-specified custom linearization of IRt/c signals are also available. The 2000 Series range from 1/32 DIN to 1/4 DIN models and feature Digital Signal Processing technology to retrieve true measured value from even the harshest noise environments. A full range of control features are available in the different models. Contact Eurotherm Controls, 11485 Sunset Hills Road, Reston, Virginia 22090-5286. Tel 703-471-4870, Fax 703-787-3444.



Data Acquisition and Control

Datashuttle™

The Datashuttle™ for notebook computers and plug-in data acquisition boards, offered by Applied Technology Concepts, are noted for accurate, stable, signal processing of low level signals of thermocouples which make them ideal for IRt/c use. Multiple IRt/c's can be directly connected to the boards. Applied Technology Concepts can be reached at Tel (508) 772-1823, Fax (508) 772-7723.

WorkBench for Windows™ - Easy-to-use, Windows-based data acquisition and control software.

The very easy-to-use icon-based WorkBench for Windows™, includes a special **Exergen IRt/c Module** that allows easy software "linearization" of the IRt/c signal over a wide temperature range. With it, for example, one IRt/c sensor can be used over a 0-1400°F (-18-760°C) temperature range. An added feature is a software provision for compensating for emissivity, or for looking at small targets. This allows the user to correct for different emissivities by software and display a truer target temperature after an initial calibration.

WorkBench for Windows™ with the **Exergen IRt/c Module** is available from Applied Technology Concepts. They can be reached at Tel (508) 772-1823, Fax (508) 772-7723.



Transmitters

ST-2000 Smart Transmitter

The ST-2000 Smart Transmitter is ideal for situations where a customer wishes to use IRt/c sensors over wide target temperature ranges (0-1400°F (-18-760°C)) and convert the output of the sensor to a linearized 4 - 20 ma signal for control purposes. IRt/c output curves and calibration factors are stored in programmable software memory in the ST-2000 Smart Transmitters.

The ST-2000 has built-in "peak picking" capability, allowing IRt/c sensors to measure the maximum temperature of intermittent targets. A user-selectable maximum decay function maintains the transmitter output over interruptions to provide a stable, useable temperature signal.

An optional local display makes set-up easy and can be moved from transmitter to transmitter. A hand-held terminal for remote set up makes it possible to change transmitter range, emissivity, peak -picking decay rate, or any other parameter from a control room or other location. The ST-2000 is available from Applied Technology Concepts. They can be reached at tel (508) 772-1823, fax (508) 772-7723

