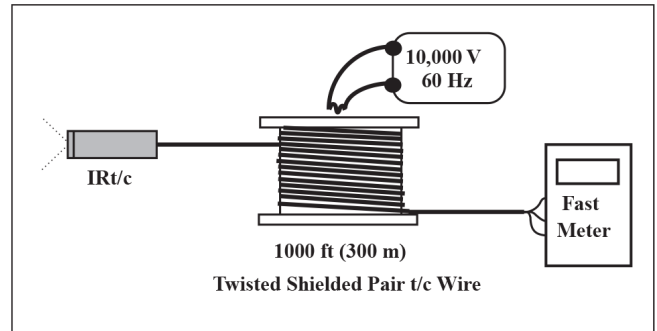


IRt/c CAN BE USED WITH UP TO 1,000 FEET (300 M) OF THERMOCOUPLE EXTENSION WIRE

With twisted shielded pair thermocouple extension wire, an IRt/c can be mounted as far as 1,000 ft (300 meters) from the readout device, even in a very fierce electrical noise environment. The extraordinary noise suppression characteristics designed into the IRt/c make this possible, without using a transmitter. The IRt/c housing is electrically isolated from the signal leads and is connected to the shielded ground of the extension cable. For long distances, the twisted shielded extension cable should be used, and the shield connected to a good electrical ground.

A demonstration test was performed with a 1000 ft (300 m) coil of twisted shielded pair of extension wire, with 100 ft (30 m) unwound, connecting an IRt/c to a fast (100 msec response) A/D conversion



module to a computer. As a noise generator, a 60 Hz 10,000 volt transformer and spark generator was set up to spark within 6 inches (15 cm) of the wire. The test results showed less than 0.1°C of noise at any relative position of the wire, spark, and transformer.

Exergen Global offices:

USA
400 Pleasant Street
Watertown, MA 02472
Tel: +1 617 923 9900 press 4 for industrial
Fax: +1 617 923 9911

The Netherlands
Pastoor Clercxstraat 26
5465 RH Veghel
Tel: +31 (0)413 376 599
Fax: +31 (0)413 379 310

industrial@exergen.com
www.exergen.com