



EXERGEN IRt/c™

Self-Powered Infrared Temperature Sensors

- Self-Powered Thermocouple Output
- No Active Components
- Hermetically Sealed
- MTBF >1,000 years
- Light weight and small sized
- Intrinsically Safe
- Accurate
- Repeatable
- Interchangeable
- Over 300 Models



ACTUAL SIZE

**The Most Reliable
Non-Contact
Temperature Sensors
on Earth**



Made in USA

EXERGEN Corporation . 51 Water Street . Watertown, MA 02472 . 617-923-9900 . Fax 617-923-9911 . www.exergen.com

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The **EXERGEN** Self-Powered IR Sensors

	micro IRT/c	IRT/c.01	IRT/c.03	IRT/c.07
POWER	NONE REQUIRED, self powered by the Seebeck effect			
ACCURACY	±1% of reading at factory calibration conditions			
LINEARITY	±2% or 4 °F (2 °C), whichever is greater at approx. ±36 °F (20 °C) from the calibration point, complete polynomials available			
REPEATABILITY	± 0.02 °F (0.01 °C)			
INTERCHANGEABILITY	±1% or 1 °F (0.5 °C)			
AMBIENT TEMPERATURE RANGE	-40 to 212 °F (-40 to 100 °C)	-40 to 160 °F (-40 to 70 °C)		
SIZE	1.00" x 0.25" Dia. (25.4 x 6.3 mm Dia.)	1.28" x 0.55" Dia. (32.5 x 14.0 mm Dia.) PG 11 Thread	1.49" x 0.55" Dia. (37.8 x 14.0 mm Dia.) PG 11 Thread	3.25" x 0.75" Dia. (82.6 x 19.1 mm Dia.) M20 x 1.5 Thread
CONSTRUCTION	Stainless Steel, hermetically sealed, with a variety of mounting options	High strength ABS Plastic, hermetically sealed, two mounting locknuts supplied		
RELATIVE COST	-0.5	-0.7	-1.0	-1.25
AIR PURGE	Air Purge Jacket available to clean & cool to 347 °F (175 °C)	NONE		
DISTANCE : SPOT SIZE	~ 1:2	~ 1:1	~ 3:1	~ 7:1
MINIMUM SPOT SIZE	0.1" (3 mm)	0.3" (8 mm)	0.25" (6 mm)	0.8" (20 mm)
OUTPUT	K type thermocouple only	J, K, T, E type thermocouple		K type thermocouple only
SENSING RANGE	-50 to 975 °F (-45 to 524 °C)	-50 to 550 °F (-45 to 290 °C)		
TIME CONSTANT	~ 50 milliseconds	~ 100 milliseconds		
IMPEDANCE	~ 12 to 35 kΩ	~ 1 to 4 kΩ	~ 4 to 8 kΩ	~ 3.5 to 14 kΩ
SPECTRAL RESPONSE	5.5 to 20 μm	6.5 to 14 μm		
CABLE	3' (0.9 m) of thermocouple duplex insulated, teflon jacket, unshielded, 24 AWG, stranded. Custom lengths available.	3' (0.9 m) of thermocouple extension grade, PVC jacket, unshielded, 24 AWG, stranded. Custom lengths available		
RATINGS	Exceeds NEMA 4, 4X, IP 67, intrinsically safe, and CE rated			

Please call **EXERGEN** Industrial Sales at 617-923-9900 ext. 238 for more info.

Visit
www.exergen.com
 (Industrial Division)
 for up-to-date detailed specifications on all non-contact temperature sensors.

High Reliability at a Low Cost!