Infrared Temperature Sensors
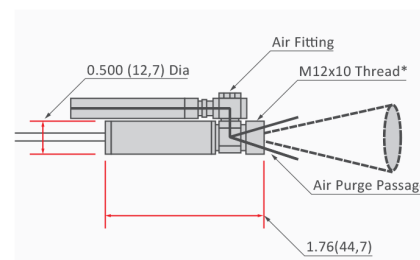## DATASHEET

IRT/C.3X

Product Overview

The IRt/c.3X features:

• Infrared Thermocouple IRt/c
• Non-contact
• Self-powered
• Intrinsically Safe
• Repeatability 0.02°F (0.01°C)
• Interchangeability ±1%
• Resolution approx. 0.0001°C
• Small Size

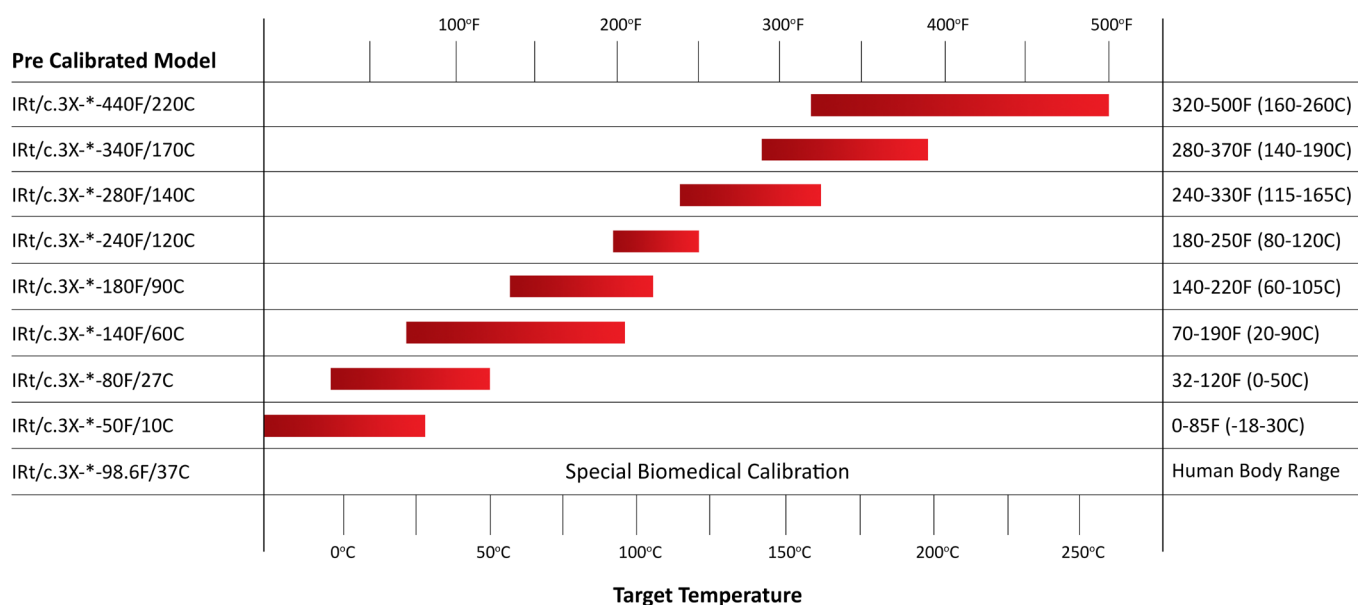*IRt/c.3X includes ss mounting bracket & locknuts

Technical Data

Sensing Range	-50 to 1200°F (-45 to 650°C)
Ambient Temperature Range	0 to 248°F (-18 to 120°C)
Optimum Range Selections	Eight models per t/c type (see Temperature Selection Chart)
Field of View	approximately 3:1 (17°)
Minimum Spot Size	.25" (6mm)
Spectral Response	6.5 to 14μm
Output Impedance	4 to 8 Kohms approx
Response Time	100 Milliseconds

Dimensions	1.76" x .50" Dia. (44.7 x 12.7mm)
Housing	Stainless steel, hermetically sealed, exceeds NEMA 4,4X; IP65, 67, cable shield grounded to housing and electrically isolated from signal
Cable	Twisted shielded pair of base thermocouple material (J,K,E,T), 3ft (.9m) std lenght, Telfon sheated, reated to 392°F (200°C) continuous service
Weight	1.4oz. (40 grams) with cable
Air Purge	Built-in; designed for severe paint or ink environment; 3' (0.9 m) of tubing provided

Calibration

Ordering information **IRt/c.3X-*** (Thermocouple Type) - (Precalibrated Temperature Range).
Thermocouple type J,K,E,T over temperature range specified.

Temperature Selection Chart

Pre Calibrated Model	100°F	200°F	300°F	400°F	500°F	
IRt/c.3X-*-440F/220C						320-500F (160-260C)
IRt/c.3X-*-340F/170C						280-370F (140-190C)
IRt/c.3X-*-280F/140C						240-330F (115-165C)
IRt/c.3X-*-240F/120C						180-250F (80-120C)
IRt/c.3X-*-180F/90C						140-220F (60-105C)
IRt/c.3X-*-140F/60C						70-190F (20-90C)
IRt/c.3X-*-80F/27C						32-120F (0-50C)
IRt/c.3X-*-50F/10C						0-85F (-18-30C)
IRt/c.3X-*-98.6F/37C	Special Biomedical Calibration					Human Body Range

0°C   50°C   100°C   150°C   200°C   250°C

Target Temperature

Specifications subject to change without notice