



## **VARIO-ZOOM LOW-TEMPERATURE FIXED-MOUNTED MINIATURE INFRARED TEMPERATURE TRANSDUCER**

TTL/SLR INTRA-OPTICAL LIGHT SIGHTING AND **VARIO-ZOOM** FOCUS  
(PATENT NO. 4,494,881 & PATENTS PENDING)

**MODEL 6000.1ZL**

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1891 North Oracle Road Tucson, AZ 85705 • P.O. Box 5276 Tucson, AZ 85703-0276  
Toll Free: (800) 422-4342 • Phone: (520) 792-4545 • Fax: (520) 792-4546  
Internet: EverestInterscience.com • E-Mail: info@EverestInterscience.com

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### **VARIO-ZOOM IR SENSOR**

The **VARIO-ZOOM** is a revolutionary fully self-contained infrared temperature sensor that is only 7/8" in Diameter and 2-1/4" in Length! The **VARIO-ZOOM** is a low-temperature, non-contact infrared temperature sensor measures temperatures from -40°C to 100°C or -40°F to 212°F with 0.1°C or 0.1°F resolution. It has accuracy of  $\pm 0.5^\circ\text{C}$  or 1.0°F.

Our patented TTL/SLR Intra-Optical Light Sighting System (Patent No. 4,494,881) provides a visible light emitting diode that illuminates the EXACT Target AREA being measured. The pattern of the detector in the infrared thermometer is projected on the target, providing a three-dimensional reading of the target.

The field of view is variable from 2° to 20° using our new **VARIO-ZOOM** (patent pending) focusing feature.

The standard outputs for the **VARIO-ZOOM** are 4-20 mA, 0-5 Volts or Analog Millivolt (10 mV/°C). Optional outputs are Type J or Type K Thermocouple.

The Response Time of the **VARIO-ZOOM** is 0.10 Second. Emissivity compensation may be set from 0.1 to 0.98.

- **EXTREMELY SMALL INFRARED SENSOR - 7/8" X 2-1/4"**
- **TTL/SLR INTRA-OPTICAL LIGHT SIGHTING SYSTEM (Patent No. 4,494,881)**
- **VARIO-ZOOM FOCUS (PATENT PENDING)**
- **VARIETY OF OUTPUTS**
- **THREE DIMENSIONAL SIGHTING OF TARGET**
- **SAFE (NO LASERS)**



**VARIO-ZOOM  
LOW-TEMPERATURE FIXED-  
MOUNTED MINIATURE INFRARED  
TEMPERATURE TRANSDUCER  
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**www.EVERESTINTERSCIENCE.COM**



# VARIO-ZOOM LOW-TEMPERATURE FIXED-MOUNTED MINIATURE INFRARED TEMPERATURE TRANSDUCER SPECIFICATIONS

TTL/SLR INTRA-OPTICAL LIGHT SIGHTING AND *VARIO-ZOOM* FOCUS  
(PATENT NO. 4,494,881 & PATENTS PENDING)

## MODEL 6000.1ZL

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### TEMPERATURE MEASUREMENT

<b>Scale Range:</b>	-40°C to 100°C or -40°F to 212°F
<b>Resolution:</b>	0.1°C or 0.1°F
<b>Accuracy:</b>	±0.5°C or ±1.0°F
<b>Repeatability:</b>	±0.1°C or ±0.2°F
<b>Temperature:</b>	All Functions in °C or °F
<b>Noise Effective Temperature:</b>	<0.1°C or °F

### OPTICAL CONSIDERATIONS

<b>Optical Configuration:</b>	Robust, Aerospace-Quality, Double-Coated Zinc Selenide Optics per Military Specification MIL-C-13508
<b>Spectral Pass Band:</b>	8 < Wavelengths < 14 Microns
<b>Sighting:</b>	Patented TTL/SLR Intra-Optical Light Sighting: Visible Light Illuminates the EXACT Target AREA being Measured
<b>Illumination Source:</b>	Light Emitting Diode - SAFE - NO LASERS!
<b>Focus:</b>	Variable from 2° to 20° with <i>Vario-Zoom</i> (Patent Pending)

### OPERATING CONDITIONS

<b>Operating Environment:</b>	-40°C to 100°C or -40°F to 200°F, up to 99% Relative Humidity, Non-Condensing
<b>Storage Temperature:</b>	Same as Operating Environment Temperature

### ELECTRICAL INTERFACE

<b>Power Requirements:</b>	5 V to 26V DC (Current Draw: 40 mA)
<b>Output Signal:</b>	Standard: 4-20 mA, 0-5 Volts or 1.0 mV/°C Optional: Type J or K Thermocouple

### GENERAL

<b>Response Time:</b>	0.10 Second
<b>Emissivity Compensation:</b>	0.1 to 0.98 Settable
<b>Operating Distance:</b>	2 cm to 300 Meters
<b>Dimensions:</b>	7/8" Diameter by 2-1/2" Length
<b>Warranty:</b>	One Year Limited Warranty on Parts & Labor

Everest Interscience, Inc., has a policy of continued design upgrade. Therefore, we reserve the right to change specifications without notice.