Convir IL Series
PC Configurable
Non-Contact Temperature Sensor with
4 to 20 mA Output

- Configurable temperature range, emissivity setting etc. from a PC via CalexLink software (supplied)
- Features max; min; average and instantaneous readings; peak or valley hold
- Temperature range -40 to 500°C
- Emissivity: 0.1 to 1.0
- Response time: 200 ms to 90%
- Stainless steel housing
- Field of view: 10:1 or 30:1
- 4 to 20 mA output
- Quick and easy installation
- Optional air/water cooled housings and air purge collars
- Sealed to IP65

The IL Series is a range of high performance, compact sensors which measure the temperature of inaccessible or moving objects and materials. They measure temperatures from -40°C to 500°C accurately and consistently, with an outstanding response time of 200 ms. The 4 to 20 mA output is compatible with almost any indicator, controller, recorder, data logger etc. without the need for special interfacing or signal conditioning.

The IL101 has 10:1 optics making it suitable for most applications. The IL301 is specially designed for small or distant targets and has an optical resolution of 30:1.

All IL Series sensors are fully configurable from a PC using CalexLink Software supplied. This user friendly software enables the user to set the range and emissivity; apply filtering; select max, min, average or instantaneous readings; and peak or valley hold processing. Other features include Data Acquisition, Alarms and a Scrolling Graphical Display.

The IL Series Sensors are easy to install and will operate in ambient temperatures up to 50°C. For more hostile environments or difficult mounting conditions a wide range of accessories is available.

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GENERAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>(Sub ranges available by PC Configuration)</th>
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<tbody>
<tr>
<td>-40°C to 500°C</td>
<td>-20°C to 500°C</td>
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<table>
<thead>
<tr>
<th>Field-of-View</th>
<th>IL101MT-X</th>
<th>IL301LT-X</th>
<th>IL301MT-X</th>
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<tbody>
<tr>
<td>10:1</td>
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<td>30:1</td>
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Output 4 to 20 mA (linear with temp)
Configuration Via PC parallel port conforming to IEEE1284
Accuracy ±1% of reading or ±1°C whichever is greater
Repeatability ±0.5% of reading or ±0.5°C whichever is greater
Emissivity 0.1 to 1.0
Response Time, 90% 200 ms (90% response)
Spectral Range 8 to 14 µm
Supply Voltage 24 V DC (28Vdc max)
Sensor Voltage 9 V DC min
Max Loop Impedance 750 Ω

MECHANICAL
Construction Stainless Steel
Dimensions 25 mm diameter x 108 mm long
Thread mounting M20 x 1 mm pitch
Cable Length 1 m
Weight with Cable 175 g

ENVIRONMENTAL
Environmental Rating IP65
Ambient Temperature Range 0°C to 50°C (250°C with cooled housing)
Relative Humidity 95% max. non-condensing

ACCESSORIES
- Fixed mounting bracket
- Adjustable mounting bracket
- Air purge collar
- Air/water cooled housing
- Laser sighting tool
- Portable calibration checker

OPTIONS
- Longer cable (5 m max.)
- Certificate of calibration

DIAMETER OF TARGET SPOT MEASURED VERSUS DISTANCE FROM SENSING HEAD

- IL101
- IL301